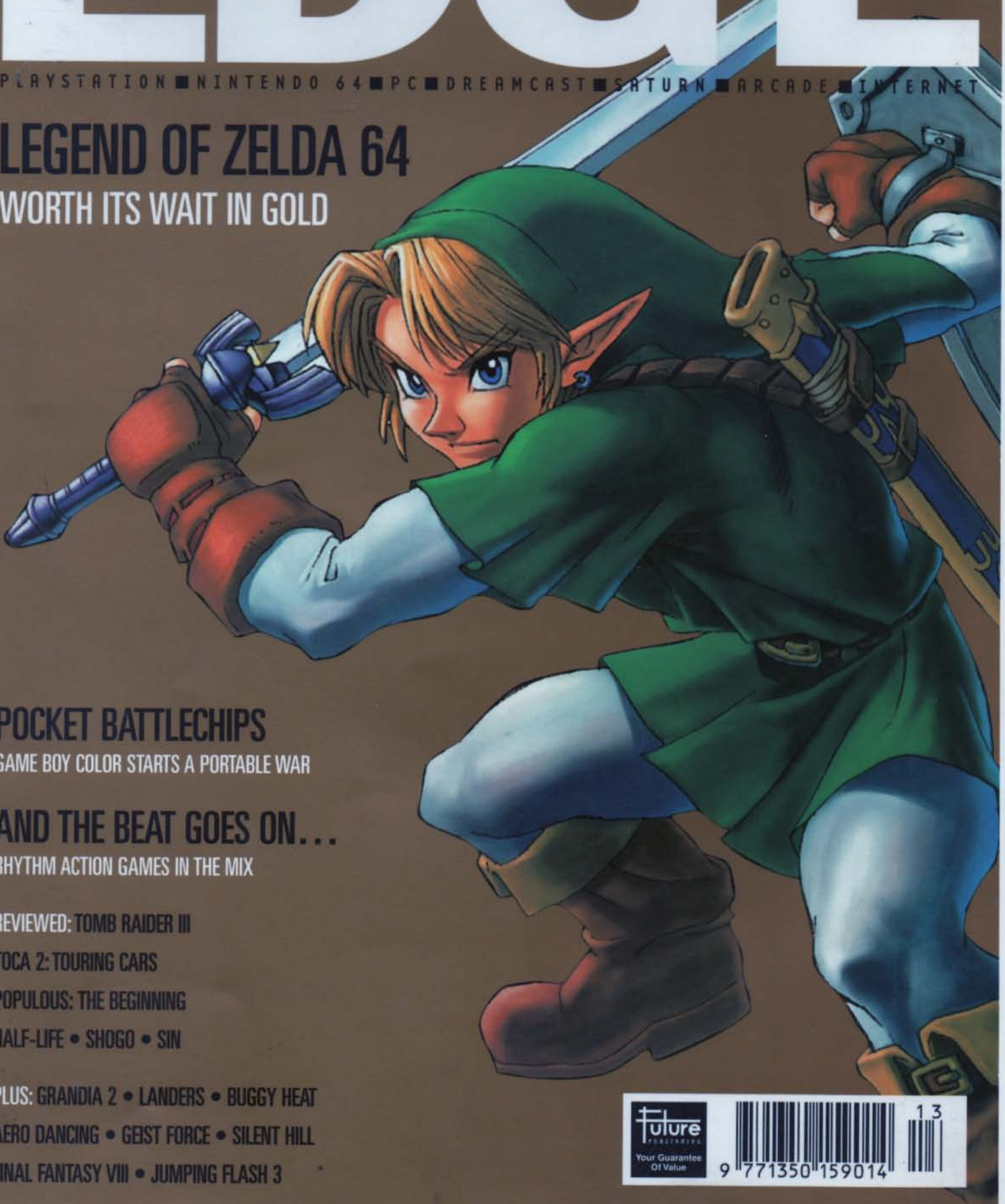
THE FUTURE OF INTERACTIVE ENTERTAINMENT

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EDGE

PLAYSTATION ■ NINTENDO 64 ■ PC ■ DREAMCAST ■ SATURN ■ ARCADE ■ INTERNET



LEGEND OF ZELDA 64

WORTH ITS WAIT IN GOLD

POCKET BATTLECHIPS

GAME BOY COLOR STARTS A PORTABLE WAR

AND THE BEAT GOES ON...

RHYTHM ACTION GAMES IN THE MIX

REVIEWED: TOMB RAIDER III

TOCA 2: TOURING CARS

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While gamestore owners in Japan continue to slash the price of Nintendo 64s in an effort to clear their stocks, here in the west it's a different story: thanks to the release of one single title, *Legend of Zelda: Ocarina of Time*, Nintendo's console is once more the hottest piece of videogaming hardware available.

Few expected the game to be of such extraordinary quality – but then Nintendo's dedicated team of in-house coders, led by Shigeru Miyamoto and working within the NCL development facility casually referred to as the Mother Brain, has a knack of delivering the goods – frequently against the odds.

In the three years that *Zelda* has been in production, a core team of nearly 50 staff worked on the project (including peripheral staff, that number rises to around 120). Nintendo built its own motion-capture studio in which almost every sequence of animation was sourced (technicians even built an artificial horse). The game had four separate directors, each dedicated to a specific element such as character creation or combat, and only when these four pieces of the puzzle were complete could the game be brought together to work as a whole – which is where Miyamoto-san, in the role of producer, came in.

The creation of N64 *Zelda* may prove how convoluted game development has become in the late-'90s, but it also serves to underline just how much gamers now have to pay for quality – not necessarily in monetary terms (the 256Mbit game will retail here for £50), but in patience. Three years is a long stretch, and Nintendo must be hoping that the audience it once so clearly targetted (the early teens) hasn't, in that time, moved on from videogames and on to other pursuits...

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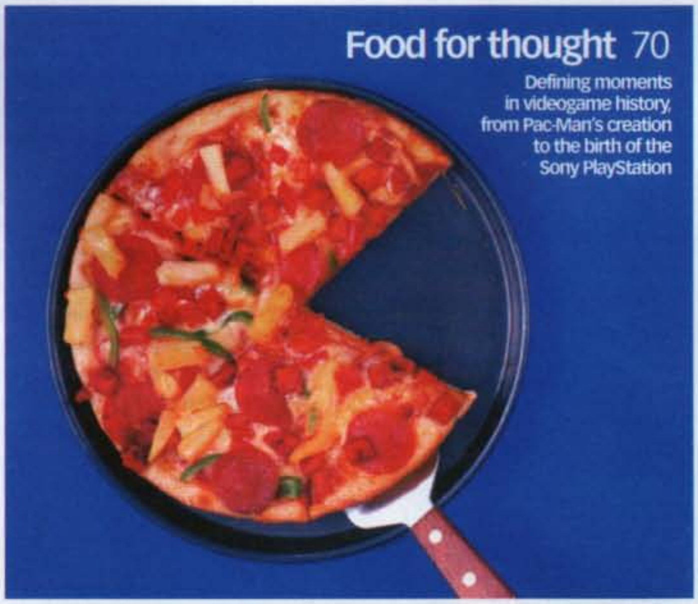
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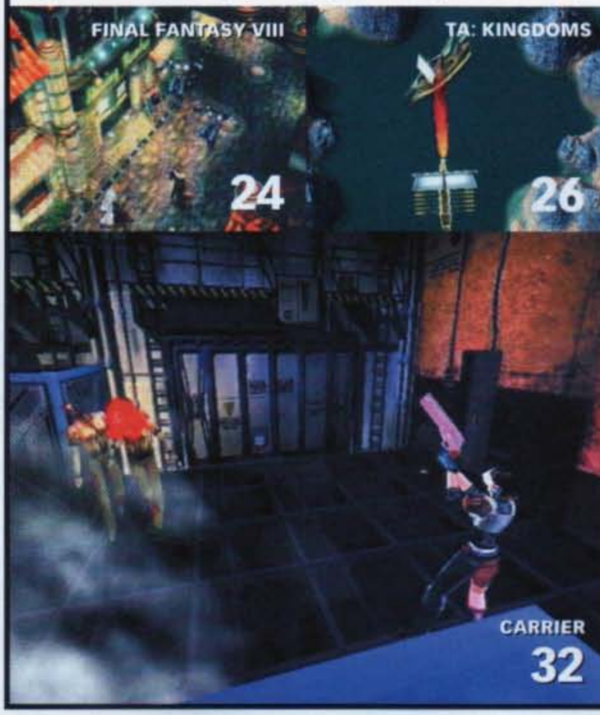
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PRESCREENS 13

On the eve of Dreamcast's release, Edge previews several new titles for Sega's machine, plus high-profile projects from Square and Cavedog





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From the Japanese team responsible for 16bit adventures such as *Landstalkers* comes a gorgeous new RPG for Sega's Dreamcast

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Cutting Edge

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The latest news from the world of interactive entertainment

DREAMCAST: SEGA STUMBLES

NEC fails to fulfil its graphics hardware commitment, while several key titles are pushed into the New Year



Chinks have begun to appear in Sega's 128bit armour, with its new Dreamcast console suffering both hardware and software setbacks prior to the machine's Japanese debut. Most shocking are the difficulties that NEC is having with the manufacture of the console's PowerVR 2DC graphics chipset. Rather than the 500,000 units Sega was intending to ship in Japan between the November 27 launch and the end of the year, it now seems likely that no more than 100,000 are going to be manufactured.

The second major hitch is the delay of several major titles, of which *Sega Rally 2* is included. AM2's conversion of its coin-op hit racing title has now slipped from its position in the launch line-up to January 14. However, the game was decidedly unimpressive when it debuted at the Tokyo Game Show in October, and any delay can only mean that Sega is not prepared to repeat the catastrophe that *Daytona USA* proved for the Saturn.

Happy new year

Other titles that have shifted to January 14 include Climax Graphics' *Blue Stinger* and NEC's curious *Sengoku Turb*. Meanwhile, Sega's new *Sonic* instalment, *Sonic Adventure*, has suffered a minor slip, moving back to December 23. Perhaps above all others, this title will be pivotal in securing Dreamcast's reputation, and Sega is understandably unwilling to take chances.

The deficit in initial Dreamcast numbers was brought into sharp relief on October 22, when Sega Enterprises' president Shoichiro Irimajiri halted the taking of pre-orders for the console in Japan. Such actions would not be warranted, given that pre-ordering only commenced on October 20, if the shortfall was not of significant size. However, the number of bookings made on the first day alone exceeded 50,000, indicating that the stoppage was a prudent move. Sega's sales target remains at one million units by the end of its financial year (April '99).

NEC's difficulties are apparently related to the complexities of making a chip with a 0.25micron thickness. Speaking for NEC in Japan, **Aston Bridgman**








The delays to Dreamcast's software line-up aren't disastrous, but they do cast a faint shadow over the unit's launch (the most critical time in its schedule). Some of the titles to have slipped include (clockwise from top left): *Sonic Adventure, Seventh Cross, Blue Stinger, Sengoku Turb, Evolution* and *Sega Rally 2*

claimed that, "The situation is that Sega is seeing great success with its pre-orders for Dreamcast – much more than was expected, consequently putting a lot of pressure on us." He went on to add, "We also hit teething problems when we introduced the PowerVR to production at 0.25micron, as happens invariably with all new products, and the two factors have coincided to create a temporary bottleneck in supply."

While the company offers no official figures on the number of rejected processors, some sources suggest that the figure could be as high as one in three. At time of press, it was unclear how hard this would impact on the amount of Dreamcast units available at retail in Japan. Sega is due to issue a statement regarding how many consoles are anticipated for its domestic market, so expect more news next month.

Grey area

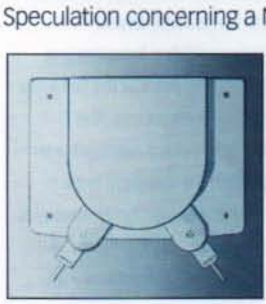
The impact of NEC's problems is likely to be felt in certain areas here, too – specifically hardcore gamers' wallets. British grey importers were unsure what price point could be expected for Dreamcast in the UK, but it's certain that original quotes of £400 for a Japanese machine will mean little. One source felt that if the supply was reduced, a return to the original, giddy PlayStation highs of £1,000 were likely.

Sega addresses rumours

Journalists in Japan recently attempted to investigate some of the rumours that have surrounded Dreamcast since the project's inception. While some stories, such as there being no plans for a limited-edition version of the console, come as little surprise, others are of more interest. Chief among these is the revelation that Sega has no plans to decrease the price of Dreamcast in its home territory for this financial year, at the very least. It's also claimed that the console will not be able to access 'adult' Internet sites via its modem. It's not yet clear how this is to be achieved, but one option could be for Sega to insist that the machine will only talk to locations that 'bounce back' approval signals when access is attempted.

PLAYSTATION 2 BE OR NOT TO BE?

Speculation concerning a November announcement continues unabated while dev kits are reported to be arriving in January



Although the machine itself is still at prototype stage (PS1 pictured here at a similar point in its life), PS2 dev kits should be with coders in early '99

By the time you read this, two events will have transpired. The first is that Sega will have launched Dreamcast in Japan, and the second is that Sony will have cleared the air surrounding strong reports claiming that PlayStation 2 would be officially announced on November 20 in Japan.

When contacted by **Edge** to confirm the story, Sony Europe denied the rumour outright. Such an announcement would, of course, certainly dampen enthusiasm for Dreamcast, but it could also have a similar effect on PlayStation sales this Christmas, which makes any confirmation more likely to appear in 1999.

Meanwhile, respected Japanese Website Nikkei Electronic Wire has posted details of a new Toshiba RISC processor which is destined for use in a Sony product. The 250MHz unit reportedly contains an MPEG2 decoder capable of playing back DVD Video, which certainly ties in well with the suggestions that PlayStation 2 will use DVD-ROMs as its primary storage medium. However, it seems strange that Sony would allow a major hardware announcement like this to be made in such a half-hearted fashion, which suggests that the chip is destined for use in other technological initiatives, such as a set-top box.

Finally, some UK-based videogame developers have secretly revealed that they will be receiving PlayStation 2 dev kits and early software libraries shortly after Christmas. The time for Sony to play its hand must be drawing near.

Project X named

VM Labs' nascent Project X console/set-top box chipset has received a new name, which apparently communicates its "brilliant graphics and accessible space-age technology," according to Lexicon, the branding company responsible. The firm's previous creations include Pentium, PowerBook and DeskJet (all of which are better than the name it coined for VM Labs).

Henceforth Project X will be known as Nuon (for whiter whites...), complete with a new logo that thankfully goes some way towards redressing the balance.

EMULATORS FAIL TO STOP AT THE STATION

High-spec PCs can now run PlayStation games better than Sony's original console

Hardware emulation and retrogaming are no longer analogous, if current advances by the burgeoning PlayStation emu scene are to be taken seriously. With a number of fledgling packages available to download over the Internet, perfect replication of Sony's hardware on reasonably specced PCs is no longer a possibility – it's an inevitability. Tantalisingly, such a program could also, in theory, make its way to Dreamcast.

Edge has long championed the efforts of the emu fraternity, and their efforts in creating software-based programs that 'mimic' real-life hardware, such as the SNES, arcade PCBs or even Commodore's Amiga. Distribution of ROM or disk images, however, remains a thorny issue. Without the permission of a copyright holder, providing copies of games software remains, essentially, piracy – no matter the age or perceived obsolescence of the title in question.



Despite its remarkable resemblance to some kind of psychedelic screen-saver, *PSYKE* is fast forcing the PC emulation scene into the headlines

Better by design

The PlayStation emulator, by design, neatly sidesteps this issue. With the majority of PS games far too large for download before Kbps become Mbps, users of such programs must buy an original copy of any title they wish to play. Unfortunately, in order to run emus such as *PSYKE* or *PS Emu Pro*, gamers must first acquire a copy of the PlayStation's BIOS. Although freely available from a number of Internet sites at present, the legality of downloading this ROM is questionable.

Even the classic rallying cry of the emu scene – 'If you own the original hardware or software, it's legal!' – holds little weight in this instance. The most widely available BIOS image in existence does not include territorial lock-out routines. It's commonly referred to as SCPH1000 and, **Edge** can categorically state, won't be the code found inside your UK, US or Japanese PlayStation.

Legal loophole

If Sony decided to curtail all PlayStation emulation activity, it's perfectly plausible that a team of coders could reverse-engineer the BIOS code, creating a 'legal' equivalent. This presents an intriguing possibility for Sega. With *PSYKE* programmed in C++, and being potentially DirectX compliant, porting it across to Dreamcast would be a relatively painless procedure.

Exponents of both PC and Dreamcast platforms will be delighted to discover that, not only could all PS titles run perfectly on their platforms in time, but they could offer better visuals.

As early demonstrations of compatible software running with 3Dfx enhancement illustrate, polygon-based titles are tangibly improved with the addition of PC3D hardware. At present, though, *PSYKE* and *PS Emu Pro* support a limited catalogue of PlayStation titles, with varying degrees of success. CD audio – naturally – presents few problems, yet a lack of FMV sequences and chip-based sound remain issues both packages need to address. Yet, from *Alundra* to *Fighting Force* and even, incredibly, *Tekken 3*, the number of games that run with each increases with each successive release.

With Sony publicly forecasting at least another two years at the hardware forefront for the PlayStation, the existence of emulation packages is an issue to which the company must attend. Its decision and future strategies will not only affect the availability of PS programs, but – in all likelihood – the entire emulation scene as a whole. **Edge** awaits an announcement – from Sony, its lawyers, or even Sega – with considerable interest.



Once loaded with a PlayStation BIOS, *PSYKE*'s true potential comes into focus. 3Dfx support is currently being tidied up by independent coders

MONSTER TITLES SET FOR CHRISTMAS **SHOWDOWN**

After year upon year of mundane Christmas holidays, this year's steps up a gear

Christmas 1998 is shaping up to be one of the most memorable software skirmishes in videogaming history. And it's one that will see international publishers competing for the appetites of gamers well before before turkey, stuffing and stodgy puddings are brought to the table.

Most significantly, this season marks a time when the N64 arguably becomes the format of choice for those hankering after the world's best videogames. With the excellent *Turok 2* hitting shelves on December 4 and the Holy Grail of Nintendo gaming, *Zelda*, supposedly hot on its heels, THE Games' time for rejoicing has arrived. And all this on the back of a strong autumn line-up that's already seen *F1 World Grand Prix*, *F-Zero X*, *1080° Snowboarding* and *Body Harvest* interfacing with cartridge slots around the UK.

A hundred thousdand copies of *Legend of Zelda: Ocarina of Time* (see p84) are expected to arrive in the UK by December 11, with a further 100,000 arriving before the 25th. But these are still provisional numbers and dates in the eyes of retailers. Because of the intense pressure being placed on NCL's cartridge-manufacturing plants by the global demand for *Zelda* and *Turok 2*, a small question mark hangs over whether the epic adventure will make it to the shops in time. *Zelda* is set to appear in the US on November 23, but for the UK version to slip at the final hurdle would spell disaster for THE.

THIS SEASON MARKS A TIME WHEN **THE N64 ARGUABLY BECOMES THE FORMAT OF CHOICE** FOR THOSE HANKERING AFTER **THE WORLD'S BEST VIDEOGAMES**

The PlayStation's own UK line-up of commercially astute, bankable sequels seems deeply uninspiring by comparison. In the absence of a PAL *Metal Gear Solid*, the rollout of *Crash Bandicoot: Warped*, *Tomb Raider III*, *CoolBoarders 3* (all reviewed this issue), and another *FIFA* are prime examples of a conveyor belt-style approach to software design that sees intellectual properties endlessly recycled and upgraded for year-on-year durability. Will uneducated PlayStation consumers expect anything different this Christmas? It's unlikely. Will they eventually become disillusioned with videogaming? Quite possibly.

For those craving some originality, however, the PC – while entertaining sequels of its own – offers some respite. Valve's accomplished *Half-Life* shows how the firstperson genre should be evolving, while the quality trio of *Populous: The Beginning*, *GP Legends* and *Grim Fandango* satisfies traditional PC gaming tastes. More console-flavoured offerings can be found with *Wargasm*, *TOCA 2*, and not forgetting, of course, *Tomb Raider III*. But if only sure-fire *C&C* sequel *Tiberian Sun* had made it to market on the right side of December, then perhaps more gamers would be wishing for Voodoo 2-powered P400s poking out of their Christmas stockings.

Away from the bustling High Street stores, specialist importers will be cashing in on Dreamcast this year – if they can get their hands on any units, that is (see p6). As Sega's desperately limited supply forces up the retail prices of machines that do make it over, the delayed *Blue Stinger* and *Sega Rally 2* could postpone the purchasing decisions of some potential buyers. More committed new adopters, however, will need to do some last-minute shopping if they fancy taking Sonic for a spin over the holiday period – *Sonic Adventure* arrives in the nick of time on December 23.



Zelda



Turok 2



TR III



Half-Life

Nintendo 64 followers will take heart in the strong line-up THE has for the Christmas period. PlayStation owners are less well-served, but the PC scene is looking healthier than ever

Yaroze victorious

The Scottish Games Alliance (SGA) recently announced the winners of the Games Developer UK '98 Awards at a ceremony held at Stirling Castle (below). Victorious programmer Chris Chadwick's game, *Blitter Boy in Operation Monster Mall*, landed him £6,000 in prize money, somewhat offsetting the cost of the PlayStation Net Yaroze development kit he used.

Scottish game development has undergone a period of rapid expansion over the last few years. DMA Design managing director and chairman of the SGA **David Jones** explained the motive for GDUK as, "Identifying and fostering new and untapped talent." This was, he said, "A major issue if we [the Scottish games industry] are to continue to succeed and grow at the same rate."



3DFX FINDS NEW EDGE TO EXPLOIT

Silicon Valley's 3D princes are putting on the multiplayers with Voodoo2, to the 'Power of 2'

Following last month's report of an imminent bloodbath for 3D chip designers, 3Dfx has kicked off a new campaign that the company hopes will put it back in the driving seat as far as hardcore PC gamers are concerned. Dubbed the 'Power of 2', the initiative sees prices of Voodoo2 cards cut significantly. At the same time, board suppliers are setting up bundle deals enabling punters to purchase two boards at once which they can then install in their machines to virtually double gaming performance using Voodoo2's SLI (scan line interleaving).

Already the effects are being seen here in the UK. Guillemot has cut the recommended price of its 12Mb Maxi Gamer 3D 2 card by £60 to £140. A company called AudioWorks, meanwhile, has come out of nowhere to ship its 12Mb Power 3D 2 at just £100, and is shipping two cards in an SLI bundle for an official price of only £200. Retailers are pushing prices down even further, with Watford Electronics selling two Power 3D 2 cards at only £190 – a huge saving of £10. With such downward pricing pressure, Diamond and Creative Labs should soon follow suit.

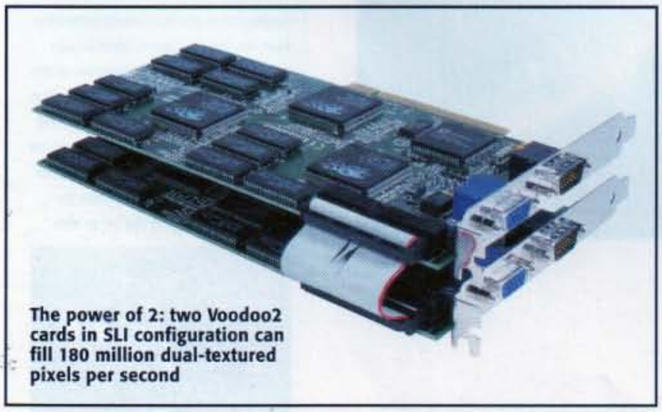


A western scene rendered using the upcoming Glaze 3D chipset. The near photorealism is thanks to the power – equivalent to four Voodoo 2 cards

Future proofing

Under SLI, two Voodoo2 chipsets (which each support dual texturing) share the rendering workload with one board filling the pixels in the odd-numbered scan lines on the display and the other chipset filling those on the even ones. This results in an average fill rate of around 180 million pixels per second. In terms of future proofing – a major concern of PC gamers fed up with updating hardware every six to 12 months – Voodoo2 SLI bundles are good value. Two boards deliver the highest fill rate available, and with dual-texture support only beginning to trickle into games the 3Dfx solution is likely to stay on top for at least another six months. To squeeze more power out of the SLI configuration, 3Dfx has released new drivers that push performance up by 50 per cent (or so it claims, at least).

But dual-board SLI isn't the only solution. It's now possible to get two Voodoo2 chipsets on a single card. Quantum 3D has just launched the Obsidian X-24, which sees one Voodoo2 board piggy-backing another. The difference is that it only takes up one PCI slot inside the PC, making it attractive to users who have already upgraded. The unattractive thing about the X-24 is its price, which weighs in at a hefty £350, although Quantum promises a dramatic cut in time for Christmas.



The power of 2: two Voodoo2 cards in SLI configuration can fill 180 million dual-textured pixels per second

Show time

The future direction of the 3D hardware industry will be far clearer following this month's Comdex show in Las Vegas. As **Edge** went to press, nVidia's marketing representatives were planning to show business users how high-quality 3D graphics using the Riva TNT chip could improve visuals in applications such as Web commerce. Meanwhile, nVidia is courting the business market, believing the gaming market to be too small to support the development costs of 3D chipsets. Finally, S3 is expected to announce the Savage 3D 2, which will join Voodoo2 and the TNT in supporting single-pass dual texturing, delivering better-coloured lighting and complex surface texture effects.

Glazed over

A hotly tipped new contender on the 3D chip scene is Finland's Bitboys Oy. The startup has a technology called Glaze3D which is expected to hit the market in the second half of next year, and boasts fill rates of 400 million dual-textured, illuminated, fogged, alpha-blended, anti-aliased, Z-buffered pixels per second. That's just over four times the speed of Voodoo2, and over twice the speed of Voodoo2 SLI. Put two Glaze chipsets in the same machine and the 'Power of 2' bumps the figure up to 800 million. It will work with DirectX 6 and OpenGL, supporting the bump-mapping features available through DX6. No board manufacturer has signed this powerful chipset as yet, although when it does make it to the market, it will face strong competition from Voodoo3 and Savage 3D 2.

KONAMI TESTS IMPORTERS' **METAL**

UK arm of *Metal Gear Solid* publisher calls a halt to grey market US imports

Grey clouds gathered on the horizon recently – for grey importers, that is – as two Japanese companies fired legal warning shots across the bows of import game distributors in both Europe and the US. The implications for those who take their videogaming seriously are potentially serious.

In Europe, it's Konami (UK) Ltd causing a fuss over the American version of *Metal Gear Solid* (the title's European release is scheduled for February 1999, as it has to be translated into several different languages and converted for the PAL format). At the end of October a letter was issued from the firm's Uxbridge base, cautioning retailers that '*Metal Gear Solid* is a registered trademark of Konami UK and the rights to sell this game in the UK are held solely by Konami UK.' The extraordinary letter goes on to state that 'Should it come to our attention that these registered rights are infringed, we may take up enforcement proceedings or our rights in the relevant courts.'

Similarly, Capcom Co Ltd has sent notice to US import companies claiming that dealers bringing copies of *Marvel Super Heroes Vs Street Fighter* into the country are infringing Federal trademarks, Federal unfair competition rulings and Capcom's copyright. A strict deadline of 15 days has been set for importers to reply in writing, confirming that they have ceased to bring copies of the game into America. Failure to do so could mean that Capcom will 'Persue its legal and equitable remedies in order to vigorously protect and enforce its rights.'

All of which leaves **Edge** pondering what could have stirred such heavy handedness on the part of Konami and Capcom. While the import market for *Metal Gear* is undoubtedly small compared to the scale of mainstream sales, it remains a profitable area. Given the hype that has surrounded the game, Konami's concerns would seem to centre around European sales revenue.

The Capcom case is stranger, though, particularly as the version of *MSHVSF* most often imported is the Saturn one, which will never see an official western release. Whether game publishers have more sinister motives, related to a desire to dampen the ambitions of importers in the face of a global marketplace (as is the case in the music business), isn't clear. **Edge** will be keeping a watchful eye on the situation as it develops.

SCI SWERVES TO AVOID **BBFC** RATING

An uncut *Carmageddon II* slips by the censors thanks to the Net





Despite the British Board of Film Classification's attempts, UK players are able to acquire the 'true' version of *Carmageddon II: Carpocalypse Now* featuring human beings rather than just zombies. SCi had originally intended to release an ELSPA '15'-rated version and a 'full gore and human' alternative carrying an '18' certificate from the BBFC. However, due to continuing delays regarding a decision from the BBFC, SCi decided to release the ELSPA-certified version only. Yet patches altering the game's code to display human pedestrians instead of zombies have been posted on SCi's international *Carmageddon II* support Website, undermining any action the BBFC may have been considering. Thousands have already downloaded the patches since the title's November 6 release.

As text files available free of charge from a US-based Internet site, the patches fall outside the jurisdiction of the UK's Video Recordings Act and consequently the charge of the BBFC.

Allegedly alarmed about how the game's scoring system – which 'awards points for killing people' – could relate to a 'standard psychological theory' stating that individuals may repeat certain behaviour for which they have been rewarded (see p124), the BBFC had planned to meet with psychologists to evaluate the potential psychological impact on players.

Carpocalypse Now's predecessor, last year's *Carmageddon*, proved just as controversial, and eventually saw an appeals board overturn the BBFC's initial decision to ban the title in its 'full blood' incarnation.

EDGE AWARDS **1998**

Next month's issue will present **Edge**'s selection of the year's leading games and technology

In January's issue, **Edge** will be hosting the year's definitive awards section, picking the brightest stars from the last 12 months in videogaming. As ever, the selection process will be rigorous, acknowledging the year's most memorable moments and the people who made them happen.

Since last Christmas, there have been numerous titles that deserve commendation, from *Zelda*, *Turok 2*, *1080° Snowboarding* and *F-Zero X* on the N64, to *Gran Turismo*, *Metal Gear Solid* and *Resident Evil 2* on the PlayStation. The year has also witnessed PC titles finally reaching a level of technological and conceptual polish that has put the cat well among the console pigeons. *GP Legends*, *Half-Life*, *Grim Fandango* and *Unreal* are but some of the games in the running for accolades.

For the full results of **Edge**'s best of '98, plus a rundown of the games that have set the technological pace through the year, look out for **E**67, on sale December 23.

PRESCREEN

EDGE PREMIERES INTERACTIVE ENTERTAINMENT'S FRESHEST FACES

Men only

Is videogaming really a single-sex sport?

According to the analysis of a selected sample taken from the recent **Edge** Readership Survey, 100 per cent of the people reading this sentence are male. The reality may be slightly different, as statistics based on anything less than the total number of readers are bound to be inaccurate, but not by far. The figures for this and other videogame magazines make enlightening reading, with the percentage of male readers consistently in the high 90 per cent margin. Why?

The traditional answers do little to clarify the situation. Apparently, female gamers don't like violent titles, they like cute entertainment that's easy to pick up – such as *Parappa the Rapper* and Pikachu. And this narrow view does hold some water, with recent industry reports indicating that a much higher proportion of girls liked *Oddworld: Abe's Oddysee* than other titles, because of the quirky and non-aggressive central character.

Clearly, the videogames industry needs to overcome such ingrained biases if it is ever going to become a real massmarket entertainment medium. Grossing more worldwide than the music industry means little if half of the world isn't buying into the scene. And so the question remains: where are the female gamers?

In truth, some females do enjoy elements of videogaming – once the initial prejudices about playing 'computer games' have been shattered. Too many memories are perhaps tainted with images of excitable brothers crowded around Sinclair Spectrums and Commodore 64s, and with so many aspects of the industry as it stands today appearing to take advantage of the female form (trade shows littered with scantily clad models, games featuring outrageously proportioned female figures, specialist magazines slapping hired flesh on every other page – the list goes on), it's little surprise that women can be repelled by it.

However, none of the above conclusively explains the extreme paucity of female gameplayers, and maybe the reason behind it lies elsewhere. Or maybe there isn't a specific reason at all – perhaps that's just the way it is. Statistics indicate that considerably less women enjoy hobbies (of whatever description) than men. If that truly is the case, then maybe there is no reason to ponder the disproportionate involvement of genders in videogaming. Perhaps, as is the case with a car engine, it's simply a case of one side of the fence finding it fascinating and absorbing, the other looking upon it as boring beyond belief.







Pa Rappa scored a definite hit with females, as did Abe in his *Oddysee*. But what about more violent games such as *Quake* – is the potential there for these games to cross the gender gap?

Edge's most wanted

1999's switched-on stars



Power Stone

(Coin-op) Capcom

Rarely have realtime videogame characters been portrayed with such solidity and clarity. This Naomi-powered coin-op is destined for cult appeal.



TA: Kingdoms

(PC) Cavedog

After *C&C*, it seemed as if Westwood had the strategy game genre all sewn up. Cavedog and *TA* proved it wrong. Expect the sequel to impress.



Sega Rally 2

(DC) Sega

Now beginning to look a lot more like its Model 3-powered big brother, *Sega Rally 2* is finally shaping up to be a Dreamcast killer app.



South Park

(N64) Iguana US

This issue's Alphas reveal the progress that's been made with what could be 1999's most outrageous videogame – just wait until you hear the samples...

Index

PRESCREEN ALPHAS

HUDSONSOFT LEADS, AS IT LOOKS TO DO JUSTICE TO NINTENDO'S FLAGSHIP PROPERTY

MARIO PARTY

FORMAT: **NINTENDO 64** DEVELOPER: **NINTENDO/HUDSONSOFT**













Themed around some of Nintendo's classic Game & Watch titles, this new N64 project is an offbeat experience designed to be primarily a multiplayer game. It features a total of six stages which take the form of board games, with over 50 sub-games to discover and dice rolls used to progress to new levels. As these screens show, several characters have been borrowed from *Mario*'s catalogue.

DELTA FORCE

FORMAT: PC DEVELOPER: NOVALOGIC













Novalogic's realism-based stealth military simulation has huge potential. As a member of the eponymous special operations squad, your survival (and that of your team members, for that matter) relies on successfully applying a tactical approach to a series of energy-sapping missions. These may include rescuing hostages, acquiring enemy intelligence, or capturing drug barons, for example. The multiplayer mode, in particular, promises to be great.

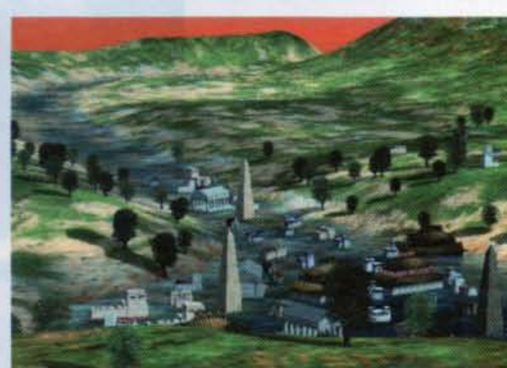
BLACK AND WHITE

FORMAT: PC DEVELOPER: LIONHEAD









The Circuit Racing mode confines... (Just kidding.) There is much still to say about Lionhead's epic *Black and White*. Recent additions to the game include water effects (shown here flooding a village), implementation of facial expressions on the creatures, and technical improvements to the graphics engine. The latter is well illustrated by this screenshot (left), which reveals the detail that can be represented, even at great distance.

SEGA RALLY 2

News of the six-week delay may be frustrating but **Edge** believes it's the best thing that could happen to Dreamcast *Sega Rally 2* – the version shown at the Tokyo Game Show looked frighteningly like a poor 3Dfx PC racer. Indications now suggest that Sega has ditched much of the original code, and these new shots look far more encouraging.





SOUTH PARK: DEEPLY IMPACTED

FORMAT: **NINTENDO 64** DEVELOPER: **IGUANA US**

Turok 2-style explosions, snowballs, sniper chickens, alien dancing rays, the highly intriguing (and slightly worrying) cow launchers, multiplayer gameplay, non-stop action (apart from the cut-scenes) and blasphemic, socially maladjusted eight-year-olds with a complete disregard for political correctness: a fine recipe. **Edge** can't wait for the finished game to arrive.











OGRE BATTLE 3

FORMAT: **NINTENDO 64** DEVELOPER: **QUEST**

Quest's previous fantasy wargames, *Ogre Battle* and *Tactics Ogre*, are still regarded as reference points among serious fans of the genre. Now the company has developed a new version for the N64, featuring realtime battles, multiple magical spells and advanced AI. English-speaking fans will be pleased to learn that the search for a western publisher is on.











CASTLEVANIA 64

FORMAT: NINTENDO 64 DEVELOPER: KONAMI

For a while, it looked doubtful that adding a third dimension to Konami's vampire-themed adventure would work, while early demos suggested that the coders responsible were struggling to use the power of the N64 to its fullest. The jury it still out on the former, but these latest shots are at least more indicative of the visual quality to be expected from the finished product.











SAGA: RAGE OF THE VIKINGS

First shown in **E**59, PC title *Saga* should be ready for review next issue. A mixture of historical events and Viking mythology, Cryo's ambitious strategy-management title requires you (as chief of a Viking clan) to gain control of your land by subjugating the other beings inhabiting your world. Expect to fight elves, dwarfs, trolls, ghosts and sea serpents. Search the ocean for land, conquer it, farm it, defend it and set off to raid new territory...

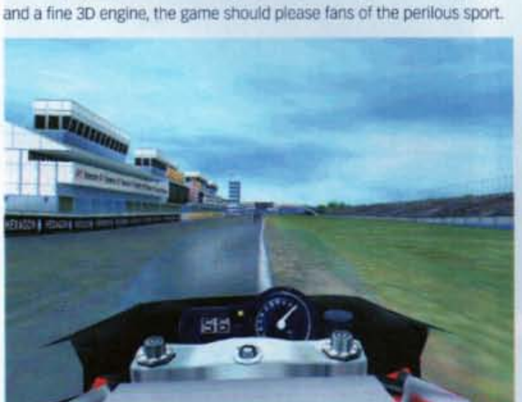




GP500

FORMAT: PC DEVELOPER: ASCARON

While its subject matter may never grab mainstream attention in the same manner as Formula One, a beta version of *GP500* provided **Edge** with a buzz this month. A competent motorbike sim featuring 15 tracks, realistic physics, numerous racing options (including network support), and a fine 3D engine, the game should please fans of the perilous sport.











THE GUARDIAN

One of Cryo's newly announced titles for next year, this thirdperson-perspective PC action adventure boasts an interesting mixture of detailed surroundings – both of a realistic and fantastical nature – and features a procession of different evil beings begging to be exterminated. Originally entitled *Poltergeist*, *The Guardian of the Dark Light* (working title) it represents something of a major genre departure for the Paris-based software developer.





REVENANT

FORMAT: **PC** DEVELOPER: **CINEMATIX**









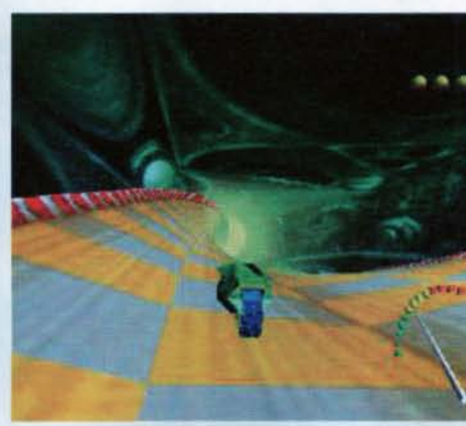


This US-developed title is a contemporary RPG set to be published by Eidos. With backgrounds drawn as bitmaps and characters constructed from polygons, a high level of detail is maintained for both. Couple that with realtime lighting – and the developer's sworn commitment to pumping *Revenant* full of gameplay – and it begins to show promise.

EXTREME G 2

FORMAT: **PC** DEVELOPER: **PROBE**











While the original *Extreme G* received a lukewarm welcome in **Edge**, this follow-up is hoped to address the game's problems, not least the feeling that you rarely felt completely in control. This new PC version appears fairly atmospheric, and benefits from the crispness of 3D-accelerated graphics.

POWER STONE

FORMAT: **DREAMCAST/NAOMI** DEVELOPER: **CAPCOM**





Capcom always appears eager to work with new technology (it is supporting Bandai's Wonderswan, and is one of the few confirmed Nuon partners in Japan), so it comes as no surprise that it has several Dreamcast titles in production. *Power Stone* should be the first to make it to market, and these shots suggest that it will make some impact. Capcom's new European office should ensure that the game is an early UK Dreamcast title.

EVANGELION

FORMAT: **NINTENDO 64** DEVELOPER: **BANDAI**





'Neon Genesis: Evangelion', a manga and anime series of intermediate quality, has now made the jump to Nintendo's 64bit console. Whether it's going to be a welcome guest will not be known until spring '99, but, as Bandai's first outing on the N64, it will have to make a substantial impact. While *Evangelion* features dialogue sequences, it's essentially a mech-themed action game – and one with a significant helping of charisma.





SANITARIUM

FORMAT: **PC** DEVELOPER: **DREAMFORGE INTERTAINMENT**









Previously known in the UK for its thirdperson PlayStation blastfest *One*, American publisher ASC Games is about to release *Sanitarium* – something altogether different. Waking after a car crash, the game's protagonist finds himself trapped in a vast, gothic mental asylum, his face wrapped in bandages and memory muddled. Understandably, the game has a sombre tone; meeting some of the asylum's fellow 'guests' can prove unnerving.

GRANDIA II

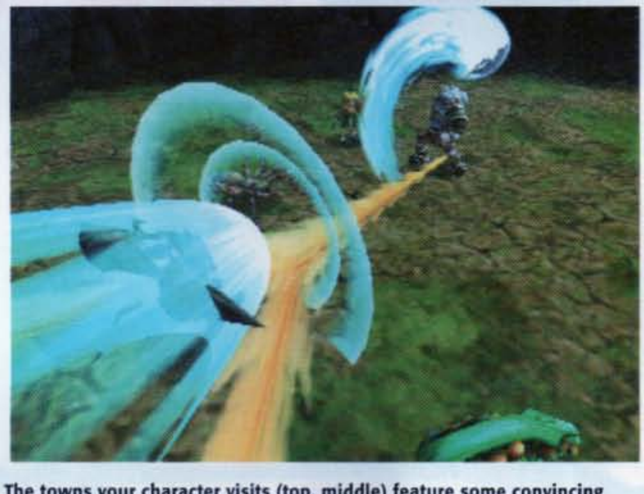
A huge success in Japan yet relatively unknown in the west, Game Arts' successful Saturn RPG *Grandia* gets a visually stunning Dreamcast sequel



The graphical quality in *Grandia II* is stunning – polygons, textures, colours, and lighting effects combine to create a thoroughly involving environment







The towns your character visits (top, middle) feature some convincing inhabitants complete with competent sound effects for extra authenticity

Although a glance at the Saturn's UK software catalogue reveals a conspicuous absence of RPGs – at least in terms of anything resembling a substantial presence – in Japan, the circumstances are somewhat different. While the *Shining Force* series, for example, was very well received by the roleplaying crowd, *Grandia* easily ranked among the format's top three examples of this engrossing genre. This is a fact that will no doubt please developer Game Arts, as well as going some way to rewarding the team's two year investment in the project.

This inevitable sequel, partly due to the Dreamcast's programmer-friendly internal development structure, is expected to take considerably less time, although not necessarily less effort. This is perhaps best illustrated by *Grandia II*'s pleasing graphical quality. Granted, the phenomenal difference in processing power offered by Dreamcast over the Saturn's 32bit architecture is responsible, but graphics don't just draw themselves – at least not yet. Technical achievements aside, Game Arts has crafted a beautiful looking game whose aesthetic merit few will manage to surpass.

Though understandably unwilling to divulge too many aspects related to *Grandia II*, Takeshi Miyaji, its producer, has revealed that the characters of the original, now all in their twenties, make a return – but the world they explore will be different and far larger than in their previous quest. And whereas the first instalment was a mostly drama-led venture, this time around the developer is striving to deliver something along the lines of an Indiana Jones-style adventure, which should considerably widen the game's market appeal. Naturally,

Format: **Dreamcast**

Publisher: **Sega**

Developer: **Game Arts**

Release: **Summer '99 (Japan)**

Origin: **Japan**







The developer has not been afraid to make use of the power afforded by Sega's 128bit machine, as demonstrated by these pyrotechnic displays

gameplay, too, has been tweaked – although there was little of any significance in the Saturn version that required attention.

The real improvements remain essentially cosmetic in nature, but the repercussions these have had on the game's atmosphere are clearly evident. Towns visited by the characters feel alive, with numerous and visually diverse inhabitants going about their business accompanied by a very convincing army of sound effects. The level of detail is highly impressive, and serves as an indication of things to come as well as setting the standard for other next gen RPGs – inside dwellings, for example, it's clearly possible to distinguish between artificial illumination and natural light streaming through windows. The protagonists are constructed with – in 32bit terms, at least – ludicrous quantities of polygons, while the dynamic camerawork adds to the lavish effect. Furthermore, the 3D battle sequences feature some visually stunning magic spells and should prove just as enthralling as those in the original.

Technical achievements aside, **Game Arts has crafted** a beautiful looking game whose aesthetic merit **few will manage to surpass**







The visual splendour of the obligatory magic spells used during the battle sequences should have *FFVIII* running for the polygonal hills

According to Miyaji-san, there are two network options currently planned for *Grandia II*. One would be the normal style game, while the other follows along the same visual lines as other multiplayer RPGs – such as the isometric structure seen in something like *Diablo*, for example. Also, discussions are underway relating to the inclusion of an ingame link that would take players to a *Grandia II* Website, where they would be able to exchange information and character data, as well as seek puzzle-solving assistance from other players and maybe even participate in a *Grandia*-related contest organised by the developer.

However, as the proportion of Dreamcast owners expected to make use of such a homepage currently stands at one per cent, Game Arts is wisely concentrating its efforts on finalising the oneplayer experience – which should prove to be something special.

FINAL FANTASY VIII

In a not-unexpected move, SquareSoft has created a milestone in digital storytelling that hints at complex emotional plot issues. Providing it survives the translation, that is...





Lighting effects, used so effectively during *FFVII*'s combat sequences, make a predictable return for this latest instalment. Their visual contribution is remarkable



Outlandish attacks are the bread and butter of confrontations, belying the simple maths that judge their effect



Alas, **Edge** regrets to announce, a western release of *FFVIII* is unlikely to occur before the third quarter of 1999, despite its imminent December launch in Japan.

There's an irony inherent in this protracted translation period. *Final Fantasy VIII* is, without question, tangibly westernised in its aesthetic approach. By replacing the angular, manga-influenced protagonists of its predecessor with a stylised, yet 'realistic' cast, it's likely that Square is acknowledging the success of the series (and, indeed, potential for greater mainstream appeal) outside of its native Japan.

In design, *Final Fantasy VIII* largely retains its forebear's resume, with play occurring on prerendered CGI backdrops. Once again, sudden and invariably unheralded combat sequences are the means by which characters are tested and, ultimately, progress and develop in gaming terms. These encounters ultimately prevent *FFVIII* from being a simple 'interactive storybook', providing a challenge that – once completed – see the player richly rewarded with further narrative.

It's testament to Square's creative integrity (and, for that matter, well-earned arrogance) that the Japanese softco has been confident enough to discard established characters such as Cloud, Barrett and Sepiroth. **Edge** can't imagine many other developers casting aside such well-crafted personalities so casually.

Squall Leonheart takes Cloud's mantle as the player-controlled 'hero', and the parallels between both are manifold. A precise synopsis of the story he stars in has yet to be revealed, although Square's slow release of video footage, renders and screen grabs – plus current conjecture – points to new plot and character information. Time-travel is believed to feature at some point, but more interestingly, Squall has a 'history' that's gradually revealed as players progress through the game, while Laguna Loire (Squall's companion) apparently has a complex make-up that becomes progressively evident as the adventure moves along (although quite how it will affect the gameplay remains to be seen).

At the time of writing, Square has made available a variety of tantalising information and visual media. One CGI sequence highlights the romance between Squall and Linoa Heartilly, showing the couple dancing while Idea, an evil witch – and potentially the player's nemesis – looks on. The potential, then, for a *FFVII*-style tragedy is intriguing. Those who confessed to being rather moved by the seventh instalment







Square has tantalised and intruiged gamers with character profiles and pictures. It is, however, a technique unlikely to succeed outside of Japan...

Format: **PlayStation**
Publisher: **SquareSoft**
Developer: **In-house**
Release: **December (Japan)**
Origin: **Japan**













Eclipsing even the best efforts of the PC 3D development fraternity, Square's designers are creating a rich variety of visual effects for *Final Fantasy VIII*. Their role might be purely aesthetic, but the impact of spells (main), for example, endures

should be ready with a new box of Kleenex as its successor attempts to tug at the heart strings.

A far cry from the revolution this new world and cast provide, *Final Fantasy VIII*'s combat is an evolution of familiar basics. The Active Time Battle reprises its prominent role, although players have an entirely new set of magical attacks at their disposal. In a similar fashion, the Materia of *FFVII* is replaced by the 'Junction' system, providing a comparably progressive means by which players collect increasingly powerful and outlandish attacks.

Square's potentially most influential tweak is one aimed at making this eighth offering more approachable. Although **Edge** has yet to see this addition in practice, encounters are to be 'balanced' to avoid huge disparities in skills between player and assailant. Hopefully, this also negates the need for occasionally tiresome 'level upping' (whereby players are required to fight numerous battles to gain the attributes necessary to defeat specific boss characters).

It's testament to Square's **creative integrity that the Japanese softco has been confident enough** to discard established characters







The promise of a 'love story' theme is interesting, yet Edge can envisage a poor translation – rendering it faintly ridiculous

With *Final Fantasy VII* a benchmark RPG, this sequel will be judged not by virtue of its technical merit, but on the strength of the tale it tells – and the dialogue it uses in doing so. *FFVII* survived a workmanlike translation thanks to the sheer strength of its characterisation and the depth of its game world. On present evidence, **Edge** would wager that this eagerly awaited successor will do much the same – albeit rather later than most fans in the west had hoped – while laying the foundations for the future of the console RPG standard.



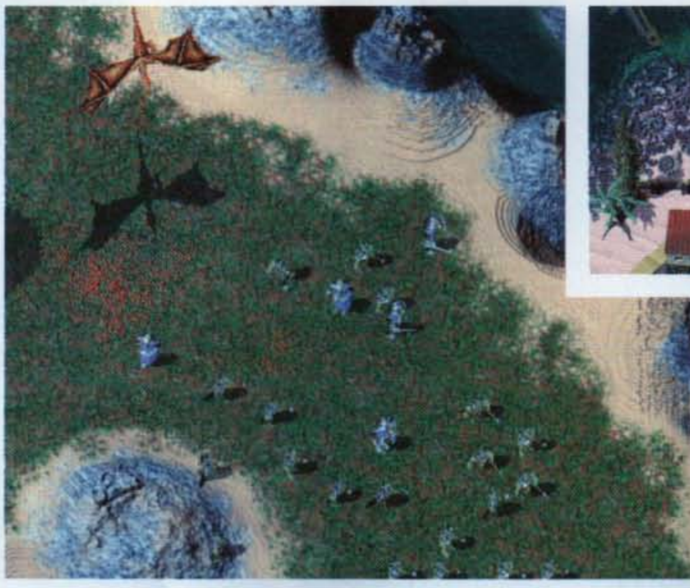




Edge hopes the more 'eccentric' *FFVIII* attack animations can be skipped by impatient players. They can tend to drag on a bit...

TOTAL ANNIHILATION: KINGDOMS

Ignoring the temptation to create a futuristic follow-up to its popular strategy title, Cavedog Entertainment has shifted the action back in time to a more mythical age







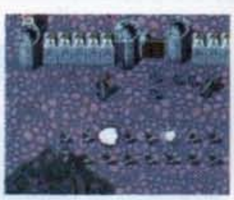


Cavedog's policy of continued support and expansion should result in further troop units being released via the Internet, if the initial 160 aren't enough...





Multiplayer games will be enriched by *Kingdoms'* four selectable and alternative armies, which will add variety through their marked differences





Through the capture of structures, the player is able to gather more of the essential 'Mana' that powers your forces

Format: **PC**

Publisher: **GT Interactive**

Developer: **Cavedog Entertainment**

Release: **March '99**

Origin: **US**

Released to wide acclaim last year, Cavedog's *Total Annihilation* (**E**53, nine out of ten) seized *Command & Conquer*'s previously undisputed class-leading reputation and strolled away with it. Featuring superior enemy AI (always a bonus in strategy games) and an intuitive interface that – unusually – did not hinder your progress, *Total Annihilation* set a standard which seemed just about unassailable. Until now, that is.

As with *C&C*, *Total Annihilation* was set in a far-flung future, where its fully 3D landscapes were roamed by marauding robots. Initially, the setting for *Total Annihilation*'s sequel, *Kingdoms*, seems very similar – only for this excursion it's gone back in time. Out go the robots and tanks of the original game, unsuitable as they are for a mythical plot. In are ushered knights, magicians, dragons and archers, swathed in a story that draws on that most classic of themes: good versus evil.

Perhaps the key aspect to *Kingdoms*' plot is the setting up of four distinct – and playable – forces, based on the elements. These consist of Aramon (earth), Veruna (water), Zhon (air) and Taros (fire), with each modelled to fit its symbolic theme. Fittingly, then, Aramon's forces are strong soldiers, with swordsmen and catapults; Veruna's are seafarers, with powerful galleons and summonable sea monsters. Zhon's units are creatures of the sky, dwelling in areas that are difficult to reach by foot, while the armies of Taros are magical, hellish beasts and undead monsters. All of these inhabit – and are struggling for control of – a mythical world called Darien.

Clearly, while the original *Total Annihilation* was applauded by gamers for catering to a diversity of playing styles, Cavedog has decided to expand and enhance that facet in *Kingdoms*. The four forces are separated into two that are good (Aramon and Veruna) and two that are evil (Zhon and Taros). In good strategy game style, neither is stronger than the other, merely different. However, the variety on offer is appealing – essentially there are four games to play and learn, four forces whose armies are entirely distinct, rather than being recoloured versions of the same basic units.

As in *TA*, all of the battle units and the landscape are drawn with polygons, rather than









In order to succeed, a bit of lateral thinking and some astute tactics are required



The new landscapes are rendered in 16bit colour, and contain an even greater variety of plants, buildings and foes to be discovered



As in *Total Annihilation*, sea-based warfare – ie, sinking lots of ships – forms a major part of the gameplay

Total Annihilation was applauded by gamers **for its diversity of playing styles, and Cavedog has decided** to expand that facet in Kingdoms

the sprites expected in this genre, which is remarkable given the fine detail onscreen. Soldiers and creatures alike are beautifully and imaginatively rendered, exhibiting a craftsman-like care on Cavedog's behalf. For *Kingdoms*, Cavedog has rendered the visuals in 16bit colour, adding richer graphical depth through a wider palette. Additional features include a three-setting magnification function, and the ability to direct proceedings from the game's separate radar view.

Other than the new selection of forces, *Kingdoms*' major gameplay update is the shift away from the resource management that has been a stalwart feature of the strategy genre for years. Instead of collecting or mining some mineral, you rely on mana, an all-pervading energy that's a product of the world and its inhabitants (much like the 'force' in 'Star Wars'). Selected monuments and structures radiate a greater amount of mana, placing the impetus on you to capture important locations. You expend mana by casting spells or constructing buildings – and, as in *Total Annihilation*, there are plenty of the latter to choose from.

All of the creatures in the game will be far more independent, gathering mana as small groups or even alone, rather than feeding it to one massive pot. In addition, individual units will gain experience points which then enhance abilities such as speed of movement, construction capability and attack strength.

Given the reputation and popularity of *Total Annihilation*, *Kingdoms* would be a commercial success regardless of its new merits. It's reassuring, then, that its creators have avoided the temptation to churn out a lazy sequel. While the swords 'n' sorcery theme has been done to death, to have left *Total Annihilation* stranded in the future could easily have hampered the flow of fresh ideas. And on first impressions, that certainly doesn't seem to be the case.





Visuals are also set to be enhanced by new support for hardware acceleration

GEIST FORCE

Its graphical ambition is unmistakable, but will peering into the dazzling reflections of another Dreamcast title reveal a very different picture?







Although developed in the US, there's an undeniable Japanese-like quality to the designs in *Geist Force*. Hopefully this is a sign that, despite the west's FMV obsession, eastern-influenced gameplay will also feature prominently

Despite being slated for release on December 10 in Japan – just two weeks after the Japanese Dreamcast roll-out – *Geist Force* was another title shown only in video form at the Tokyo Game Show. Its low-key presence within Sega's orange booth was another indicator of the tight scheduling Sega's Japanese launch line-up is imposing on developers, which doesn't particularly engender confidence in the chances of a strong pre-Christmas Dreamcast line-up.

Developed by Sega of America, and joining *Incoming* and *F1 Racing Simulation 2* as the first western-developed titles set to appear on Sega's console, *Geist Force* owes a debt to the company's own *Galaxy Force* coin-op from several years ago. However, enlisting Netter Digital Entertainment Inc – responsible for *Babylon 5*'s suite of digital effects – has provided considerable graphical clout for this 'cinematic shoot 'em up'. One of its main draws is a structure that sees each section of an alien world flow seamlessly into the next, with loading conspicuous by its absence. This feature has since been strangely dubbed 'non-cut PASM' – play, action, story, music – by Sega's Japanese marketing executives.

Featuring hundreds of game miles of incredibly detailed landscapes, there's no denying the richness and variety on display, with dynamic camera angles constantly shifting to provide different views of the action. The weapons system seems to be based around a *Raystorm*-style system of homing lasers (something which undermined the playability of Taito's blaster), while a skill-based reward system and multiple routes and endings have been included to enhance replay value. Sega is even claiming the employment of 'true-to-life' physics for your ship and other objects in the world.

Though the graphical ambition in this title is unquestionable, it serves as a reminder of one of the key titles in PlayStation's launch line-up four years ago. SCEI's *Philosoma* was also a 'cinematic shoot 'em up' with jaw-dropping visuals, varied camera angles but, more noticeably, a cavernous void where gameplay was supposed to be. Could history be repeating itself?

Format: **Dreamcast**

Publisher: **Sega**

Developer: **In-house**

Release: **December (Japan)**

Origin: **US**





Alien worlds flow smoothly from one to the next, making sure you never get to see a 'now loading' screen

BUGGY HEAT

Sega Rally 2 might be the Dreamcast racer everyone's waiting for, but these intrepid little buggies are just one of the competitive games that'll be turning up the heat







Buggy Heat boasts some crisp, detailed and generally impressive visuals, and looks set to tow the off-road genre into the more mainstream racing circles



The complex physics model promises to realistically convey all of the bumps and jumps of a real buggy ride. Better ring your osteopath...

With all eyes firmly fixed on *Sega Rally 2* to set the initial benchmark for Dreamcast racing games, the time is ripe for other companies to exploit the opportunities that lie in its slipstream. *Buggy Heat* is CRI's attempt to negotiate the uncompromising terrain of off-road racing – a genre whose commercial viability has frequently suffered through weak game design.

CRI's attempt, however, has the benefit of technology that can do justice to a game such as this. Dreamcast's powerful processor and huge polygon counts are ideally suited to generating undulating landscapes, and for simulating the complex physics of vehicles as they bump, jump and jostle with competing traffic. So far, *Buggy Heat* has sufficient graphical clout to be compared favourably to *Sega Rally 2*, although it's not known if CRI is employing Windows CE or a more powerful alternative to give it a visual edge.

Six stages are included, with various weather and day/night configurations. Championship, time attack, training and head-to-head, splitscreen play modes are selectable, but the most innovative aspect is the use of the Dreamcast's VMS unit. This allows players to store their driver's characteristics which can then be used to compete against other players. Another interesting feature is a replay mode that uses an in-cockpit view to show drivers how their combination of steering, acceleration and braking relates to their performance. A VMS-compatible (CPU-only mode) even permits surveying courses before a race.

While the Dreamcast racing game market is pretty much an open road at the moment, expect more competitors to appear by the time this hits the shelves in Japan in March.



Although little-known in the UK, buggy racing is a popular sport in the US and Australia

Format: **Dreamcast**

Publisher: **Sega**

Developer: **CRI**

Release: **March (Japan)**

Origin: **Japan**

AERO DANCING

As a flight sim, *Aero Dancing* might look like traditional PC fodder, but it's actually a Dreamcast title with plenty of aerial tricks to display







Built around a remarkably simple idea, this should please budding aerial acrobats everywhere. Realistic dynamics are high on the developer's hit list



Considering the Dreamcast's relatively limited joypad functions, CRI may be considering making use of the console's keyboard accessory

Format: **Dreamcast**

Publisher: **Sega**

Developer: **CRI**

Release: **February (Japan)**

Origin: **Japan**

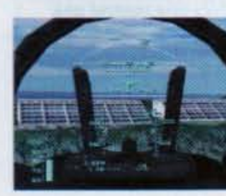
Few genres epitomise PC gaming as much as the flight sim. These screenshots would lead most to suspect that a Voodoo II card, not a console, is lurking under the hood of *Aero Dancing*, but despite looking like a western-developed PC title, it's a Dreamcast title created in Japan.

Unlike traditional flight sims, this example from CRI – a joint venture between Sega and CSK – eschews warfare and combat-based gameplay in favour of the more unusual gameplay dynamics of acrobatics. Featuring the national Japanese acrobatic team, Blue Impulse, the objective is to pull off the kind of aerial tricks you'd expect to see at an airshow, and work your way up through the ranks until you reach the level of commander.

Ten phases are offered – training (one to four), enrolment (five to nine) and expert (ten) – with missions sandwiched between briefing and debriefing sessions. A free-flight mode is included, and a simple customisation of the aircraft is possible. Also, four players can join in via Dreamcast's array of joypad ports. But no doubt the flat 'PC' landscapes will be simplified even further in splitscreen mode.

Although similar in concept to Nintendo's aerial stunt sim *PilotWings*, CRI's simulation at least has the benefit of originality when compared to the majority of titles vying for the disposable income of Dreamcast's first adopters. While the developer is keen to stress the authenticity of the dynamics in this simulation, you'll have to wait until February '99 to see how the death-defying acrobatics finally make the transition to Sega's dream machine.





It's every Japanese boy's dream: to join his country's acrobatic team, Blue Impulse, and spend the rest of his days pulling Gs until his head explodes

CARRIER

Another Dreamcast title and yet another exercise in zombie dismemberment. At this rate, Sega's new machine will have as many *BioHazard* clones as the PlayStation has racing titles



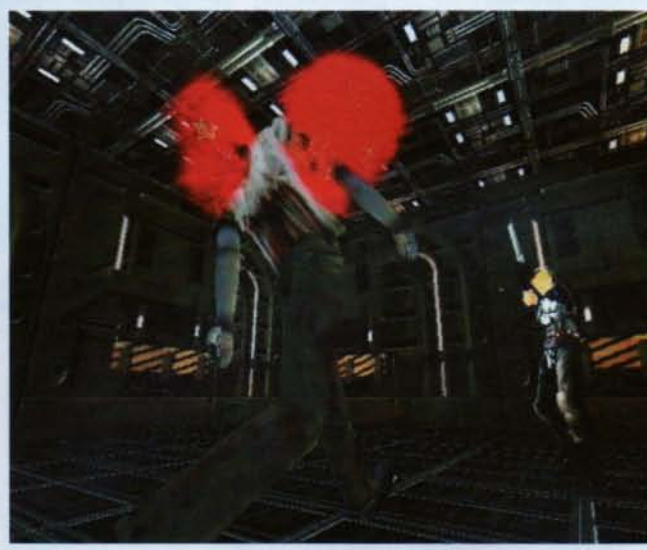








Like its plot, *Carrier*'s gameplay is unlikely to be the most revolutionary around, but you can at least expect plenty of entertaining zombie blasting





While you control one protagonist, the CPU commands the other

Format: **Dreamcast**

Publisher: **Jaleco**

Developer: **In-house**

Release: **1999**

Origin: **Japan**

Carrier may have only been recently announced, but already it has a more serious fight on its hands than its developer had possibly anticipated. There's Climax Graphics' *Blue Stinger*, of course, which should prove a worthy adversary – but **Edge** suspects that this is not Jaleco's main worry. Rather, *BioHazard: Code Veronica* is. Capcom shook the gaming world by unveiling its latest horror adventure on Sega's new hardware and already it looks fantastic.

Naturally, Jaleco hopes *Carrier* will make up some ground before its release. Its setting, an aircraft carrier named Heimdal, is less orthodox than the typical urban dystopia or alien spacecraft. The rest of the proceedings, however, are a little less unusual: a mysterious weapon cargo aboard the ship is responsible for an incident which you, as either the imaginatively named Jack or Jennifer, must investigate.

Seeing as this is proceeding according to the script of every other *BioHazard* clone, it should come as little surprise to find zombies lurking beneath deck. These fragrant individuals have to be stopped, preferably by blowing one of their limbs to smithereens, resulting in a shower of gore likely to prompt the BBFC into a fit of apoplexy. Of course, it's not just endless, mindless shooting. There are puzzles too, and these must be solved in order to progress.

Visually, *Carrier* is not quite up to *Blue Stinger* standard, although the use of a dynamic camera is competently achieved. There are further attractive touches; your actions affect the course of events as well as the ending – and, while you control one character, the CPU's 'auto action system' takes care of the other. Should the Dreamcast's heaving processor suffer a momentary lapse and allow its character to get into trouble, the game structure is said to automatically alter so that you may help your comrade out. To keep you on edge, such events are reported to occur throughout the game. It could prove an interesting feature.

POCKET MUUMUU

A new name, but a familiar concept – Sony puts the finishing touches to the third instalment of one of the earliest titles to appear on the PlayStation





***Pocket Muumuu* is SCEI's first title to support the company's PocketStation, formerly known as the PDA**

The two existing *Jumping Flash* titles have been much overlooked by gamers. A shame, really, because both are wildly enjoyable titles, as well as being the only current representatives of the severely undersubscribed firstperson platformer genre.

Pocket Muumuu, so called because it is the first PlayStation title to feature Pocket Station support, sees Robit making his third PlayStation appearance in a crisper, more colourful form than ever before, even if the graphical structure remains faithful to the first two episodes.

Set on three differing planets, your aim is to construct a theme park. In order to achieve this relatively straightforward task, money must be collected during bonus stages so that new, better rides can fill the park. Pocket Station owners, however, have the opportunity to gather extra coins. By visiting special shops in *Pocket MuuMuu* special sub-games can be downloaded to Sony's diminutive LCD-screened plastic pendant so that you can help Robit in his quest – even when away from the PlayStation nestling under your television. Once the Pocket Station is reunited with its bigger brother, points earned from playing the sub-games on the tube, in parks or on the beach, are converted into coins, which can in turn buy more attractions for the theme park.

The action in the game evolves according to a 24-hour clock, and in addition to a variety of mini-games, there are items to collect and of course, numerous enemies to dispose of.



As the theme park owner, you can have as many goes on the rides as you like. And the more money you make, the bigger the attractions become

Understandably, Sony is keen to emphasise the potential Pocket Station can bring to games, and on current form, *Pocket Muumuu* seems like a worthy ambassador for the format. It should be interesting to see what kind of gameplay additions Sony can come up with.



The PocketStation aspect is obviously limited, but at least it's integral to the gameplay, and not simply a pocket monster

Format: **PlayStation**

Publisher: **SCEI**

Developer: **In-house**

Release: **December 23 (Japan)**

Origin: **Japan**






Graphically, *Pocket Muumuu* retains the essence of the *Jumping Flash* series, while improving the resolution and increasing the colour range to create a deceptively innocent environment

BLOOD II: THE CHOSEN

The year is 2028: cities have degenerated into disease-ridden, crime-infested cesspools, and for a hundred years, Caleb has walked their streets with revenge firmly on his mind





The game's eerie nature is unlikely to appeal to all, yet on current form it isn't as dark as Acclaim's *Shadowman* or as disturbing as Konami's *Silent Hill* (see p42)



In addition to the impressive weapon range, useful items such as binoculars and night vision goggles are scattered, awaiting collection

Few will remember Caleb's struggle against the morally ambiguous Tchernobog in the original *Blood*. It was a fairly standard firstperson shoot 'em up affair whose bitmapped visuals gave it a prematurely antiquated feel in a marketplace dominated by polygonal adventures. Now Caleb is back, and this time he's geometric.

At this stage, the plot matters little. Of more concern is the current state of play dynamics, and thankfully things are looking promising. More than 30 weapons are promised for the final version, but **Edge** has already put in substantial target practice with twin Berettas, sub-machine guns, flare launchers, shotguns, as well as assault and sniper rifles. There are also grenades and proximity mines, but disposing of the many deranged – and occasionally monstrous – members of the Cabal is usually best achieved using projectile-based weaponry.

Blood II's macabre nature proves engrossing, though, and it's very playable even at this early stage of development. And, every now and again, something extremely innovative occurs – such as the presence of 'the eye', an object which can be dropped anywhere, allowing you to view the environment from a 360-degree perspective at the press of a button – very useful for enabling Caleb to peek around a corner without having his ageing face blown clean off.

Blood II uses the LithTech engine – as does *Shogo* (see p96) – but somehow the execution is not as refined as its manga-inspired firstperson cousin. The character animation is somewhat clumsy, and the environments are patchy – alternating between detailed, highly atmospheric settings, and drab corridors featuring unadventurous textures. Hopefully, this is something Monolith is working on.



The gameplay proves enjoyable, though there is still room for a few refinements





Some of *Blood II*'s settings feature attractive lighting effects as well as detailed textures

Format: **PC**

Publisher: **GT Interactive**

Developer: **Monolith**

Release: **December**

Origin: **US**

GANBARE GOEMON 2

Konami obviously feels *Dracula*, *Hybrid Heaven* and *Survivor* aren't enough titles for the N64 – medieval Japan, ghosts, ghouls, demons and familiar mystical ninjas are about to make a comeback



The most immediate – and perhaps the most important – aspect of this latest episode in the series is the inclusion of a twoplayer cooperative option





Naturally, the graphical quality has improved since Goemon's last N64 appearance. Among other effects, fire (above) is impressively realised

However you look at it, Goemon's first N64 venture was something of a disappointment. It *was* an accomplished, very playable attempt at bringing one of SNES's finest titles into the 64bit age, and it was a distinguished game too, but not necessarily the sumptuous production many were expecting. It was also rather easy.

This second, new N64 version is the series' umpteenth instalment, and is soon to hit Japan's streets – where a substantial following awaits its arrival with anticipation. Aware of this, Konami is trying not to disgruntle loyal fans by ensuring that any of the new changes maintain the overall essence of the *Goemon* titles. According to Tomoharu Okutani, the series director, the hardest aspect the team has faced this time around has been conjuring up new characters and implementing innovative features.

The proceedings still occur during the Edo era but this time around Goemon faces traditional Japanese ghosts and groups of threatening, but cute, ninja-hating monsters. Rest assured, the humorous touches in previous instalments make a definite return, as do the involving sub-plots and entertaining sub-games. Although the number of levels is currently undisclosed, you can expect to encounter five bosses before reaching the end credits.

Of course, there are visual improvements, but the most noticeable difference is the camera angle. This isn't a result of some dissatisfaction with the previous camera system – unlike many of today's games, it actually proved particularly functional in most circumstances – but is necessary due to the addition of a twoplayer option, which allows hordes of apparitions to be tackled cooperatively. And while this could be the closest N64 owners are likely to get to the legendary third chapter in the *Goemon* series experienced by many SNES players (known as *Legend of the Mystical Ninja* in the US), from what **Edge** has so far seen there's been a shift of emphasis so that action is now a predominant part of the package. Hopefully, it won't be enough to unsettle the delicate balance of the *Goemon* universe.





Expect the same mix of level exploration and boss beating, but there should be noticeably more action this time

Format: **Nintendo 64**

Publisher: **Konami**

Developer: **In-house**

Release: **December 23 (Japan)**

Origin: **Japan**

DUKE NUKEM: ZERO HOUR

Duke Nukem's N64 adventure, *Zero Hour*, might be a thirdperson title, but there's a firstperson edge and a deathmatch mode that'll have you running for cover







The enemies included in the early version of the game that Edge saw were mostly adaptations of creatures from the previous *Duke Nukem* games







The level of background detail on display is very impressive in the interior scenes, as well as outdoors, where the trademark N64 'fuzz' is largely absent





A spare controller can be used to control the camera – the best way to appreciate *Zero Hour*'s lighting effects

Despite a reasonably successful reworking of the old *Duke Nukem* formula as a thirdperson *Tomb Raider*-style adventure with *A Time To Kill* on the Playstation, Eurocom's forthcoming N64 title, *Zero Hour*, marks a return to Duke's firepower-heavy roots.

The game is played from a thirdperson perspective, but the similarities with the Playstation equivalent end there. As Eurocom told **Edge**, "We wanted to do something special on the N64 to maximise the potential of the hardware, and having looked at *Turok 2*, *GoldenEye* and *Perfect Dark*, we decided against sharing assets between *Zero Hour* and *A Time To Kill*."

Consequently, the game plays exactly like a traditional firstperson corridor game, with the cosmetic addition of Mr Nukem's onscreen figure. The rolling, jumping and acrobatics which turned Duke into a hairy, muscle-bound version of Lara in the PlayStation game have been replaced with enemies galore, and a large arsenal of weapons.

But even if the series hasn't made a massive leap in terms of gameplay, *Zero Hour*'s visuals are a generation or two ahead of the 1997 N64 version of *Duke Nukem*, which was more or less a straight copy of the PC original, with a fourplayer mode tacked on. The RAM Expansion Pak is used to enable the game to run in 640x480 mode, but even without it, the backgrounds and distant objects are rendered with clean, sharp lines, and barely a hint of fogging or pop-up.

The time-travelling storyline has enabled *Zero Hour*'s designers to include a wide variety of different locations and scenarios, from the Wild West to Victorian London, and a number of appropriate outfits for both Duke and his enemies – top hat and tails for Victorian times, and a more practical stetson-and-chaps combination for the frontier towns.

The fourplayer deathmatch mode, which reverts, sensibly, to a firstperson camera perspective, is played over a mixture of levels from the oneplayer game and deathmatch-specific arenas – most interestingly, a compact zero-friction level which adds an unusual new twist to the familiar *Turok* control system. Given the quality of the opposition Eurocom is ambitiously gunning for, it is likely to be the balance of the deathmatch gameplay that will determine *Zero Hour*'s performance next March.

Format: **Nintendo 64**
Publisher: **GT Interactive**
Developer: **Eurocom**
Release: **March '99**
Origin: **UK**





***Zero Hour* Duke isn't as agile as in *TTK*, although he is still able to swim**



ClimaxLanders

Another Dreamcast title, from another Japanese codeshop called Climax. But this little-known RPG could shape up to be a benchmark by which the true power of Sega's new console can be measured

Format: **Dreamcast**	
Publisher: **Sega**	
Developer: **Climax**	
Release: **January '99 (Japan)**	
Origin: **Japan**	

Climax Landers, an impressive new RPG for Sega's Dreamcast, is being eponymously produced by Climax, based in the heart of Tokyo's Shinjuku district. But it's not to be confused with the Climax Graphics busy with *Blue Stinger* (**E**65) – also for Dreamcast.

Responsible for Saturn titles *Dark Saviour* and *Landstalker*, Climax has maintained a strong relationship with Sega through the latter company's darkest hours. Created by a combination of those two older titles' teams, *Landers'* strong points are manifold, not least its simply stunning visuals which realise the true potential of Dreamcast perhaps better than any other title yet seen. Colourful, detailed and rich in atmosphere, *Climax Landers* shouts its next-generation status in a clear, booming voice.

Edge got the message, and hot-footed it down to Climax's HQ to meet company president **Hiroshi Naito**, who was keen to talk about the game...

Edge: RPGs are all about telling a story, about delivering a convincing atmosphere. What's *Lander*'s theme?
HN: RPGs often take place in the Middle Ages. For *Landers*, we included some







***Landers* is a turn-based RPG, with combatants waiting politely to attack one after another. Locations and foes are randomly generated each game**

medieval influences but also some modern touches – convenience stores, for example. There are also ancient and futuristic aspects. *Landers* is a complex mixture of very different worlds. Basically it's a game that you can play many times. Even after finishing the main story it's a game that you can continue to play.

Edge: What titles have influenced the development of the game?

HN: Climax is already known for creating action RPGs. However, with *Landers* we wanted to make an RPG playable by everyone. This is particularly important because we'll release [the game] approximately at the same time as Dreamcast. We want lots of users to enjoy the game, particularly players who aren't especially skilled. Although lots of fans asked us to make follow-ups to *Shining Darkness* [another Climax title] and *Landstalker*, *Landers* isn't a sequel. Nowadays, characters are 3D and can move in a 3D environment, and that was our starting point for *Climax Landers*.

Edge: Most modern RPGs are very big – is that true of *Landers*?

HN: *Landers* will be a very long game, as the *Final Fantasy* and *Dragon Quest* series are. But you'll be able to stop playing, take a rest, and start to play again.

Edge: *Final Fantasy VII* offered a vast number of locations to explore. Is that the case here?

HN: It's not an RPG where you have a huge world with numerous towns. It's one town which develops around you. There are numerous randomised 'Dungeons'. In fact, Dungeons are not dark underground places as you might imagine; they can be temples, forests, etc. It's not like the *Shining Darkness* world.

Edge: You say that the game can be played many times, but with only one location, won't the player soon learn all of the game's secrets?

HN: Dungeons change each time you enter them. In a Dungeon you will progressively power-up, but each time you enter them as a beginner. Your character's abilities will not increase, but the actual player's skill will develop. You'll gain experience and knowledge about the Dungeon you explored. And if you enter the Dungeon and complete it without dying, the stage will be clear.

"With *Landers* we wanted to make an RPG playable by everyone... particularly players who aren't especially skilled"

Edge: How does the player interact with non-player characters?

HN: Although there's only one town, it's inhabited by tens of people, and each of them has a different way of life. When you progress into the game you'll experience







The game encompasses several time zones, with play traversing centuries as the game progresses

Visually, *Climax Landers* bears the laudable distinction of being a next-generation console title that doesn't look like a PC game. Both interior and exterior locations are wonderfully stylised and rendered with remarkable detail, and are notably original













The detailed character models are still being finalised, but already stand up to scrutiny

their personalities and differences. They'll bring variety to the story.

Edge: Many newer titles, like *Sonic Adventure*, feature multiple playable characters. What about *Landers*?

HN: In the beginning, you can only select one character. But as you progress, your 'friends' will appear, and you will then be able to play as them. You'll even be able to play as characters featured in previous Climax games (Lady is coming from *Lady Stalker*, for example). A total of six characters will be playable.

Edge: How are you engineering the game's battle sequences?

HN: We thought very hard about the strategic aspects of combat. Players will fight, and try to find solutions, and if they don't work they'll have to find other ones; either different spells or weapons. But you don't fight to collect money or experience points. Players will have to win battles using their head!

"As you progress, your 'friends' will appear, and you will be able to play them. You'll even be able to play as characters featured in previous Climax games"

Landing on Dreamcast

Edge: How are you finding developing for Dreamcast?

HN: Things that were not possible before are easy because of Dreamcast's friendly development environment. But, because the machine's performance is so high, users are more demanding, they expect more. And that's what is difficult.

Edge: How about technical problems?

HN: It was very difficult for us to take advantage of Dreamcast. With the Dreamcast you display lots of polygons, much more than the Saturn – and many more than we expected. We had to remake the character meshes once we had the final hardware specifications.

Edge: Although you won't be using Dreamcast's modem, how will *Landers* work with the VMS?

HN: There will be more than ten games – one based on the Tamagotchi concept, plus there'll be action games and a casino-type game. Others will be more related to *Landers'* content, and I would say they'll be very useful to progress in the main game. Also, you can put enemy monsters in the VMS and then re-introduce them to the Dreamcast as your friends!

Edge: Finally, how much more work is there to be done on the game?

HN: *Landers* will be released in January in Japan. We're still working on the battle scenes in order to offer the best balance possible. We'll definitely be working on it until the release.

TheCharacters From left: Ryle (a thief), Lady and Marion (all from previous Climax games). Also featured are Rao, Marlin and the game's imaginatively titled chief protagonist, Sword



Silent Hill

The age-old fascination with horror rears its ugly head once more as Edge ventures into Konami's Jimbocho offices to meet the team responsible for the PlayStation's new wave of psycho-terror gaming



Given the number of copycat titles since it appeared, you'd think that life within the videogaming fraternity didn't exist before *Resident Evil*. Yet, as significant (and undeniably enjoyable) as Capcom's title proved, it merely fused a relatively untouched videogaming theme with a prerendered 3D environment – hardly a revolutionary concept.

Of course, horror had been done before – perhaps most notably in Namco's *Splatterhouse* coin-op and its subsequent home appearances, as well as a few ill-fated interactive-movie attempts, such as Sega's controversial *Night Trap*. But more than simply offering a differing approach, *Resident Evil*'s real strength lay in its immersive quality through sheer atmosphere. An involving plot, dramatic camera work, convincing set-pieces and an unbelievably eerie musical score (all helped by then-impressive visuals) – the combination of these elements produced one of the most tension-filled gaming experiences of recent times.

It's this balance that countless imitators have failed to grasp, and one that, with *Silent Hill*, Konami may well surpass. However, as mentioned in its original Prescreen treatment (**E**62), to simply pass off *Silent Hill* as yet another *Resident Evil* wannabe, albeit in realtime 3D, is to not only miss the game's







From out of nowhere (fittingly), *Silent Hill* could be a big PS game next year

essence, but to insult the team behind it, too. After all, while striving to turn it into something substantially more than just another clone hiding beneath a layer of digital gore, Konami is also the first to admit the role Capcom's evil offering has played in *Silent Hill*'s development.

"Of course, we've kept an eye on *BioHazard* throughout the proceedings, but we've really aimed at releasing a title with a stronger plot," reveals **Keiichiro Toyama**, the project director. "*BioHazard* has a general Hollywood-like, glossy atmosphere to it, while its sequel moves more along the lines you'd usually associate with an action film. *Silent Hill*, however, goes back to the roots of the horror movie – we want to scare players on an instinctive level."

Schlock tactics

Depending on your nervous disposition, this is either a good or bad thing. Since experiencing the last playable version of Toyama's idea of intrinsic horror, **Edge** is a little unsure about the prospect of eventually playing the finished version, because whereas the *Resident Evil* titles rely on shock tactics to convey the tension (something they both achieve with laudable skill), Konami's effort mounts an attack on the senses from a more psychological perspective, resulting in something far more disturbing, and subsequently more terrifying.

"The enemy characters have ears and eyes, so if you walk around making all sorts of noises they're going to look for the source of the racket," explains Toyama-san. "If you switch off your flashlight and hide you'll decrease your chances of being detected, but there's no guarantee – sometimes they'll find you anyway. While playing, you have to bear in mind that they will come for you."

And so it was that, despite the prospect of another set of expensive, time-consuming sessions involving the discussion of childhood traumas, **Edge** agreed to play the latest build of *Silent Hill*, currently two-thirds into development. The game opens with a stunning CGI sequence, shown in part to a rather attentive E3 audience back in May, and indicative of the astounding

Whereas the *Resident Evil* titles rely on shock tactics to convey the tension, Konami mounts an attack on the senses from a more psychological perspective



***Silent Hill* features seven main characters, each with different motives, and several endings are available depending on your actions throughout**

Format: **PlayStation**
Publisher: **Konami**
Developer: **In-house**
Release: **Spring '99 (Japan)**
Origin: **Japan**



Key components of the *Silent Hill* team (from left): Gozo Kitao (producer), Keiichiro Toyama (director), Akira Yamaoka (sound director) and Takayashi Sato (CG designer). As many as 20 individuals have simultaneously worked on the project to date, and the team is now seeing its shocking vision take shape

"It takes around three to four hours to render one second of footage – that's excluding the modelling, otherwise it would take a lot longer" CG designer, Takayashi Sato

quality of the other cut-scenes throughout the story. In keeping with the trend, Konami has opted for a mixture of realtime, polygon-based intervals interspersed with FMV arrangements. It's a combination also used in the *Resident Evil* games and one that in practice works better than it reads.

Given the visual elegance of the aforementioned CG work, it's perhaps a little disappointing to find out that only ten minutes' worth feature in the entire game. However, having found out how much work is actually involved at this level, **Edge** wasn't prepared to put this point to *Silent Hill*'s talented CGI designer, **Takayashi Sato**.

"It takes around three to four hours to render one second of footage – that's excluding the modelling, otherwise it'd take a lot longer. I don't even want to think of it in terms of the whole design concept," laughs Sato-san. "Let's just say that I haven't stopped working since I joined the company three years ago, and I haven't had a lot of sleep either."

The hard work has paid off, however, as even at this early stage, *Silent Hill* features some of the most realistic computer-generated video images to grace the PlayStation thus far. The level of detail is astounding, extending to wrinkles and individual hair strands clearly distinguishable on the protagonists' faces.

"As far as I'm concerned, Hollywood is currently using CGI to do scenes that cannot be done using normal camera work, such as supernatural effects, for example," explains an enthusiastic Sato-san. "What I've done is reverse the process – I've tried to bring realism to the CGI work."



The inspiration for the camera's impressive and effective routines is said to come from Hollywood's own Davids Cronenberg and Lynch





Form and function

Yet, as mercenary a view as it may seem, however good a game's FMV is, it's still mainly eye candy, and as such, not an integral part of gameplay dynamics. It can, of course, serve to relate crucial plot elements, and in *Silent Hill* you're reminded that your character, a certain Terry Mason, has just wandered into said town looking for the daughter who disappeared following a car accident (in which he blacked out) the previous night. Intrigued by a telephone's relentless ringing, and presumably keen to leave the corpse-littered streets, Mason enters a nearby café wondering if the crash had







In order to keep the game's real-world feel, you're unlikely to find many weapons scattered around



proved a little more fatal than first impressions had you believe – plunging him into the foggy realm of the dead.

In another level (first seen in an earlier state of development a couple of months ago), the protagonist searches a school, and, after several – unbelievably tense – minutes of logic-problem solving, eventually acquires an object which gives him access to an alternative dimension via a portal situated in the playground. The effect is not theoretically dissimilar to *Zelda*'s light/dark worlds, and **Edge** is hopeful that it will be used as effectively.

Waking nightmare

While the atmosphere is already undeniably in place (a fact more than supported by the sudden appearance of psychotic killer babies within the claustrophobic and panic-inducing confinement of the aforementioned educational centre and the blood-soaked corridors of a hospital setting), some of the animation remains unfinished at this stage. Evidence of this could not only be seen in zombie nurses happily gliding across the floor intent on satisfying their unrelenting desire to feast on your character's shoulders, but also in one of the massive, perturbing monsters you'll have to face if you're to finish the game.

It's a reminder that it hasn't all been plain sailing for the developer. "Our main problem was the PlayStation's lack of Z-buffering," recalls Toyama-san. "When we start playing around with camera angles it became a real problem – for a normal action game, you don't have to worry too much about these, but with a horror title, the crucial atmosphere depends greatly on camera work."

Surprisingly, Toyama-san admits to not having scripted *Silent Hill* before embarking on the project (which is some revelation considering the gravity of the title). "I just let things settle themselves into place. It's my first time as a director and I was keen to get the team's ideas into the project," he explains.

The protagonist eventually acquires an object which gives him access to an alternative dimension. The effect is not dissimilar to *Zelda*'s light/dark worlds

With only a few months to go, Toyama-san and his team will spend the time ironing the creases out of these issues as well as addressing and finalising other general gaming aspects before unleashing one of the most chilling – and potentially hugely compelling – gaming experiences around. **Edge** is happy to sit quietly in trepidation.







The torch effect (like the fog at the beginning of the game) is eerily implemented, which heightens the underlying tension in the game

And The Beat Goes On

Games and music may have flirted with each other with *Wipeout*, but what has happened since? Well, 'rhythm action' games, for starters. Edge samples the scene

Question: What was the most popular coin-op for Konami, one of the world's biggest arcade-game manufacturers, in Japan this year? (Here's a clue: the game uses ten-year-old technology – which rather rules out *Racing Jam*). Don't be surprised if you don't know the answer – few westerners would. It was in fact *Beat-Mania*, the company's DJ-ing simulator which has now reached its third iteration as *Beat-Mania 3rd Mix*.

According to its creators, based at Konami's Zama Research Center, located in Yokohama, Tokyo, *Beat-Mania*'s beginnings were inauspicious. "I didn't think *Beat-Mania* would become as popular as it is now," admits **Hiroshi Takyasu**, manager of Konami's sound development department. "It is much more than I expected. I think the main reason is players can make a good-looking performance in front of other people looking on. Players can show off. This is very important for *Beat-Mania* public."

Musical youth

Music-driven videogames are hardly a new development, of course. Epyx led the way back in the '80s with *Breakdance*, a game whose inspiration came from the eponymous dance culture of the day and the technological capabilities of the Commodore 64, whose then-powerful SID sound chip famously encouraged developers to experiment with the potential of game soundtracks.

In terms of true games, though, there would be little else to speak until the PlayStation title *Parappa the Rapper* arrived in 1997. However, the game, which received plaudits aplenty in the press, failed to sell in the west in quantities anywhere near the levels Sony expected. Enix's *Bust A Move*, meanwhile – recently renamed and released here by Sony as *Bust A Groove* – appears to have followed the *Parappa* route of mainstream popularity – ie, just not getting enough of it.

At the other end of the PlayStation music software spectrum are titles such as *Fluid*, *Baby Universe* and, more recently, Codemasters' *Music*. While the two Sony-label titles failed to kick up a storm, the latter experiment is hoped to be just the thing to mess with the brains



of PlayStation owners to the point where the concept of a music-driven package has as much entertainment value as A. N. Other Driving Game. After all, it's fair to say that many PlayStation owners will be able to relate more easily to even a bank of fairly daunting-looking on-screen controls than a series of psychedelic action scenes featuring the exploits of a floppy-eared dog and his she-flower girlfriend-type thing. (The £1.5m Codemasters is spending on marketing *Music* could get console gamers' creative juices flowing, at least.)

But regardless of how addictive *Music* is in the short term (and it is – hugely), it's still difficult to imagine the average Stella-swigging, armchair-bound PlayStation owner finding the commitment to put the thing to real use. It could easily end up becoming the Yamaha keyboard given to the child on Christmas morning, only to be slung aside by the New Year.

Which brings the scene back to Konami, which has just released a PlayStation version of *Beat-Mania 2nd Mix* in Japan (where it has sold like hot cakes).

The game has no super-cute canines in hats, nor does it feature polygon-modelled supercool characters. Plus, it's more interactive than *Fluid* and *Baby Universe*

The game has no super-cute canines in hats, nor does it feature polygon-modelled supercool characters. Plus, it's more interactive than both *Fluid* and *Baby Universe*. More than anything, though, it spews forth bite-sized lumps of lively entertainment like so few other games.

Coining it

"It's difficult to give you figures," says **Koji Okamoto**, general manager at Konami's R&D departments 1&2, "but there is almost









Hiroshi Takyasu (left) and Koji Okamoto, whose *Beat-Mania* series now has a huge following – and its own range of merchandise, including a CD player (top left) and miniature LCD version (top right)

one *Beat-Mania* coin-op per game centre here in Japan."

The coin-op itself is a robust beast, with a steel turntable and five 'sample' buttons – a configuration that hasn't changed since the first incarnations of the machine passed through the exit doors of Konami's R&D departments. "We wanted to use what real DJs use," claims Takyasu-san. "At the time when we developed the first game, techno artists and groups like the Chemical Brothers were beginning to become famous in Japan"

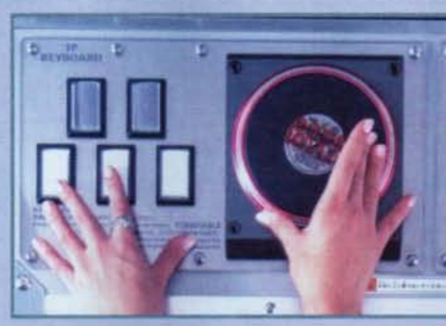
If you haven't seen a *Beat-Mania* coin-op yet (not especially unlikely, considering it hasn't been distributed in great numbers in the UK), then it's worth mentioning that it doesn't simply pick up on the most obvious strains of '90s dance music. Reggae and soul (or at least Konami's interpretations of the genres) tracks appear, with the original version of *Beat-Mania* including track titles such as 'Overdozer' and 'Love So Groovy'. "It's not good to put one's own tastes into a game," believes Takyasu-san (whose personal musical favourites include "English punk rock, but also '60s French pop such as Marie Laforet, Jeanne Moreau, Jane Birkin, etc"). "For the first *Beat-Mania* [released in Japan in December '97] I wanted to use music that was being played in clubs at that time – reggae, techno, general genres."

Takyasu-san is keen to further underline the merits of *Beat-Mania*'s appeal as a coin-op: "The players themselves aren't watching the graphics – the gallery is watching. We're working with a different objective than that of traditional videogames."

"Graphics are important, but we do not believe that they are a crucial factor to a good game. The situation in which you're playing the game and the atmosphere are important considerations, too"

SPINNING THE WHEEL

Konami's run of music-based coin-ops has expanded considerably since the first *Beat-Mania* coin-op was wheeled into an unsuspecting Japanese arcade. Every model's gameplay is based around a fundamentally similar theme, though, and it's one that will already be familiar to veterans of *Parappa the Rapper* and *Bust A Move*: simply match the on-screen prompts in order to create a perfect rendition of one of a selection of tunes. That's the theory, at least – first-time *Beat-Mania* players are often overwhelmed by the initial complexity of its controls (five independent 'sample' buttons and a turntable). While the button controls have to be pressed with accurate precision, occasionally the player will be encouraged to indulge in brief 'freestyle' scratching sessions with the turntable. Needless to say, early attempts can get quite messy.





The game of the moment (in Japan, at least): *Dance Dance Revolution*. The coin-op represents Japan's ongoing obsession with fresh forms of interaction





Konami's recently released *Pop'n Music* is aimed at young players, and offers a considerably less complex control interface than *Beat-Mania*'s (top)

Which makes the relatively weak spec of the ten-year-old board that powers the game even less significant, as Okamoto-san elaborates: "Graphics are important, but we do not believe that they are a crucial factor to a good game. The situation in which you're playing the game and the atmosphere are important considerations, too. We obviously have graphics in *Beat-Mania*, but everyone has been talking about the importance of polygons and we've demonstrated that they don't count for everything."

The third generation

The recently completed *3rd Mix* version of *Beat-Mania* has just gone into distribution in Japan, and is proving to be every bit as successful as its precursors. It's a worthy upgrade partly because it introduces a battle mode, which, unlike previous incarnations (offering twoplayer games



A dedicated *Beat-Mania* controller exists for the PlayStation version in Japan, and it's absolutely *essential*



Beat-Mania's front-end may be simplistic, but once the audio kicks in, the visuals oblige accordingly

















***Pop'n Music* features lightweight visuals – naturally, considering its target audience**

but only in cooperative format), sees players going head-to-head for the highest score (the closer you are to matching the on-screen notations, the more points you rack up). This aspect is especially suited to the Japanese market, of course, where performing for a baying audience is fundamental to the game.

This element of the gaming experience has recently been heightened further by the arrival of *Dance Dance Revolution* in Japan. Konami's other new music-based coin-op (produced by another internal R&D department, based in Kobe) was by far the biggest hit at the JAMMA show this September, and crushing the interest in other, more mainstream offerings from the likes of Sega and Namco.

In the west, however, the territory of the video arcade fails to engender such happy-go-lucky, easy-going gaming. Which should, in fact, make the PlayStation version of *Beat-Mania* an attractive prospect here. In the environment of after-the-pub entertainment, a baying audience is often not too difficult to come by, and *Beat-Mania* could further bridge the gap between music and the videogame. If, that is, Konami decides to officially release the game in the UK.

If *Beat-Mania* does not eventually make the journey to UK PlayStations, *Dance Dance Dance* (see overleaf) is also in development, which, with its more aesthetically dynamic stylings, could be a more obvious candidate for translation from Konami's perspective.

Whatever the case, Takyasu wants to "see *Beat-Mania* as a new genre," and his team is actively pursuing the possibilities offered beyond simple 'Simon'-style gameplay. If creativity in 'true' PlayStation games is floundering, maybe music-based titles are preparing to pick up the baton...

TUNING UP THE PLAYSTATION

In proportional terms, scant few PlayStation owners have been willing to experiment with titles that fall outside of the standard genre confines – but that hasn't prevented software publishers from delivering them nonetheless.

Disregarding the execrable *Spice World*, the music-led titles so far released on the PlayStation have been of a generally reasonable quality, with *Bust A Move* and *Parappa the Rapper* leading the pack in terms of sheer entertainment value, and *Music* taking the honours for the most flexible package. Essentially a 16-track sequencer (with built-in light show), *Music* is the brainchild of developer Jester Interactive, and the project was led by Tim Wright, who previously worked on tracks for the *Wipeout* series under the pseudonym Cold Storage. With 3,000 instruments and six octave scales to tinker with, *Music* is comprehensive, considering its host machine, and novice musicians should get along fine with it (but be prepared for the surfeit of cheesy samples that come packed in).



Bust A Move



Fluid



Music

While they're obviously audio-driven, many PlayStation music-oriented titles excel in graphical terms, too, from *Parappa*'s 'cut-out'-style characters, to *Bust A Move*'s distinctively rendered dancers, to *Fluid*'s atmospheric underwater content. *Baby Universe*, meanwhile, is all about visuals, and *Music* features its own 'light synth' section



Parappa the Rapper



Baby Universe

Dance Dance Dance

Given Konami's proven track record in the recently established rhythm action genre, it's little surprise that the company is following the lead of Sony and Enix by producing its own take on the 'dancing simulation'







Not so long ago, the mere mention of a game whose central premise involved making an on-screen character jig about to the accompaniment of a series of dance tracks would have elicited guffaws from anyone within earshot. Now, however, following the permeation of *Parappa the Rapper* and *Bust A Move* into the PlayStation-owning market, Konami's *Dance Dance Dance* does not seem too out of the ordinary.

In essence, Konami's game follows the footsteps of its precursors closely, with two dancers going head-to-head in familiar *Bust A Move* style, each looking to outdo the opposition by more closely following the soundtracks, and performing combo arrangements for bonus points.



Though essentially quite basic, *Dance Dance Dance*'s graphics introduce special effects on occasion (above)

Dance Dance Dance offers a total of nine different stages (each with its own distinct score), but more importantly it attempts to bring its own concepts to the party in the form of an RPG-style interface. This aspect sees players undertaking story-led sections of the game, exploring an attractively rendered town (depicted with 2D bitmapped graphics) and picking up new dance moves along the way.

Perhaps most interesting is the game's open-ended approach to the soundtracks themselves – in certain modes you'll be able to use music from your own CDs

Perhaps most interesting, though, is the game's open-ended approach to the soundtracks themselves – in certain modes you'll be able to simply pop the lid of your PlayStation and insert a CD from your own collection. It's not yet clear exactly how the on-screen characters will deal with music they haven't been programmed to dance to, but Konami claims that their responses will relate to what's spinning in the CD drive, introducing moves accordingly.

Despite such innovations, Konami's game seems to be targetted towards a fairly young age group, and its characters certainly seem primitive by comparison to those of *Bust A Move*.

Next month's review will establish whether this is a valuable step forward for the 'rhythm action' genre or merely a game that Konami felt almost obliged to push into development.







***Dance Dance Dance* lacks the visual finesse of its main rival, Enix's *Bust A Move*, but Konami has at least introduced RPG elements (right)**



EVERYTHING IN BLACK AND

GOD GAMES WORK IN MYSTERIOUS WAYS. BUT PETER MOLYNEUX HAS THE RIGHT TO CLAIM DIVINE INSPIRATION, FOR HE SPOKE FIRST UNTO THE MASSES WITH THE SEMINAL POPULOUS. NOW HE HAS RETURNED WITH A NEW FAITH, IN A DARKER SHADE OF PALE…

DUE TO A PRODUCTION PROBLEM, AN ERRONEOUS VERSION OF THIS FEATURE APPEARED IN LAST MONTH'S ISSUE. EDGE APOLOGISES FOR ANY CONFUSION CAUSED.

Format: **PC**

Publisher: **Electronic Arts**

Developer: **Lionhead**

Release: **Autumn '99**

Origin: **UK**

Late evening, couched within the discreetly opulent belly of **Peter Molyneux**'s greenbelt home, **Edge** is playing a game with nearly a dozen members of its host's development team. But there's nothing electronic in sight, not even a television set, and no home system caters for this many players. For this is Balsac, a deceptively simple puzzle game involving dozens of awkwardly shaped wooden pieces which must be stacked or passed on for the cost of a bean. Should that skewed, cylindrical 'T' piece be politely absorbed into the pile, or sent to lumber a vexed opponent? It's all about how aggressive you are, coupled with an almost spiritual sense of balance. And that, perhaps, is a fitting introduction for Molyneux's own latest creation, *Black and White*.

Wind the clock back 12 hours, and he's showing off the game at his resolutely highbrow and low-ego development base, Lionhead Studios. Nestled on an innocuous research park on the outskirts of Guildford, the company's office is playing host to the gestation of what could be a revolutionary title. A rundown of *Black and White*'s ambitious content reads like a wish list of cutting-edge computer game technology: morphing polygons, context-sensitive music, realtime physics, animation generated on the fly, procedural textures, facial expressions, and some of the most complex artificial intelligence ever realised. The story of game creation, it seems, is about to begin a fresh chapter.

"The first game I did had to be impressive," Molyneux understates. "Here I was, leaving Bullfrog, and everyone was saying, 'Was it Peter or was it Bullfrog?' So my main thought was that the game had to challenge every single aspect of computer gaming." Additionally, he states, "It had to be an impressive game, because you don't persuade all these brilliant people to come and work at Lionhead with a twat like me unless you have a good idea!"

Molyneux views *Black and White* as the logical conclusion of a path which trails all the way back to 1989's *Populous*, his

WHITE MAKES SENSE



paradigm god game. "They get smaller and smaller in scale," he admits. "After that there was *Powermonger*, which simulated a country – instead of a whole world – in a lot more detail. Moving forward from that was *Syndicate*, which was a city. That was the first game that I designed which allowed people to be good or bad. And then I moved on to *Theme Park*, which was a lot closer in scale – you had to worry about people eating and going to the toilet. Finally came *Dungeon Keeper*, which was probably the most interesting."

As Molyneux's game worlds have decreased in size, the complexity of the AI required to make them convincing places has conversely increased. *Black and White* is essentially not the simulation of a world (although that is an adjunct to its core purpose), but of a single living thing. Only through nurturing, teaching, torturing and taming a selected creature will you discover the secret of *Black and White* – and in the process reveal something about yourself. He hopes that like Balsac, "Playing *Black and White* is like taking a massive personality test. It reflects what you're actually like as a gameplayer."

What Molyneux and his team are trying to create is a game that reacts to you as a person, a world which changes according to how the player behaves: aggressive or docile, rapid or ponderous, selfish or considerate, evil or good. Black or white. However, moral judgements have been left at the door, because that isn't the game's agenda, and would ultimately spoil the fun of someone wishing to be either terribly unpleasant or angelically good. And besides, Molyneux would never like to be thought of as judgmental… would he?

BORN TO RULE

Black and White casts the player as a powerful sorcerer king, ruling over the variously populated tribes that live on a picturesque island. Lionhead is theming these around historical human races, as did Sid Meier for *Civilization*, with Vikings, Egyptians, Aztecs, Chinese, African and Celt groups. At the outset of the game these villagers have no grasp of the concept of good or evil, living instead in a world of happy neutrality. "There's no conflict, there are no wars, no hunger. These people are perfectly happy," Lennonises Molyneux. The entry of the player to this utopia brings a new and potentially turbulent element to life, as you employ various – sometimes nefarious – means to make them worship your sorcerer alter ego.

"You can be unspeakably cruel to these little people if you want to. You can thrash them to within an inch of their lives," reveals Molyneux, displaying exactly the kind of personality trait that *didn't* create *Theme Park*. "To be honest, the little people have always got on my tits in games! When they ask for something, I'm not really too interested, I've got greater things on the boil." Leaning forward he gleefully intones, "My citadel and all the landscape slowly morphs into something dark and scary and horrible."

Theme Park, it seems, was a blot on

Molyneux's otherwise bleak landscape. "*Theme Park* was nice. I definitely did it because of *Syndicate* – everyone said it was horrible. And my mother said, 'Peter, this isn't very nice, all this killing people. I hear you can kill babies in your last game!'" So much for the nice guy image, then, although changing your design ethos to keep your mum happy must count for something on the day of reckoning.

Gamers of an altogether more pleasant disposition can take a different approach to Molyneux (although the 'nice guys' at Lionhead had scorn vicariously poured upon them during **Edge**'s visit). The development team is working hard to forge the 'white' side of the game into a worthy opposite to the 'black', with an alternative set of abilities, attacks and spells. Tying in a neat link back to *Populous*, a magical, mystical air pervades *Black and White*, and the casting of spells is one of the multiple facets of the game that the player must eventually master.

As light first breaks over *Black and White*'s utopian world, the only mark of your sorcerer's influence is a citadel, standing in a state of grey neutrality, uninfluenced by the player's personality. By cajoling, treating, punishing and generally interfering with the population of the nearest tribe (including the ability to teach them the intricacies of football), your sorcerer's magical powers begin to increase. At this point in the game there are no other forces to contend with; the aim is simply to learn the control system, experiment with the various options on offer. And to start growing your creature.

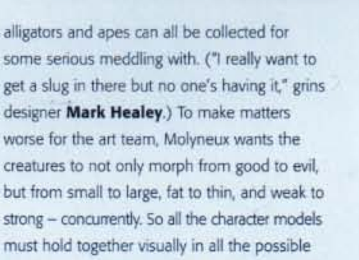
If the need to pigeonhole the indefinable cannot be avoided, then **Edge** would cage *Black and White* as being *Populous* meets Pokemon. The creature that Molyneux and his crack squad of artificial intelligence officers – Richard Evans, Mark Webley and Jonty Barnes – are in the process of giving life to, is part virtual pet, part soldier. According to the player's behaviour, be it nasty or nice, the creature's appearance – and that of the entire gameworld – morphs to reflect the state of play. Care, share and join a knitting circle and you are rewarded with a glowing example of goodness and beauty. Turn to the dark side and the creature and landscape will twist and blacken, reflecting all the unpleasant feelings poured into its development.

FORWARD LOOKING

"At the start of the game what you get is what you see, which is the most beautiful world in any game ever. That's the brief," reveals Molyneux. "The idea of *Black and White* is that it appeals to more than just the hardcore gamer, and we're going to do that by making it look gloriously beautiful." As play progresses, the sea level will gradually fall, revealing more and more of this utopian world.



Once fully reared, *Black and White*'s creatures are a wonder to behold – not least to the "little people" that Molyneux shows no compassion for



To aid him in his quest, Molyneux has gathered together a group of artists – but not necessarily animators – who are currently struggling to grasp the complexities of *Black and White*'s character morphing. "The good and evil thing has been so difficult to get our heads around," admits ex-*2000AD* artist **Christian Bravery**. "The evil stuff is quite obvious, but good is a lot harder to get the hang of. They've got to look tough and cool, but look goodly at the same time." **Paul McLaughlin** adds, "It's a bit of a challenge. Maybe we haven't woken up to it yet..."

So far, Lionhead has settled on the player being able to 'grow' several alternate domestic and wild animals. Cows, sheep, lions, chickens, alligators and apes can all be collected for some serious meddling with. ("I really want to get a slug in there but no one's having it," grins designer **Mark Healey**.) To make matters worse for the art team, Molyneux wants the creatures to not only morph from good to evil, but from small to large, fat to thin, and weak to strong – concurrently. So all the character models must hold together visually in all the possible states, with some interesting consequences.





"Daisy the cow is going to be cool when she leans to the good side!" quips McLaughlin.

In order that such demanding distortion of the skeletons doesn't fall at the first hurdle, Lionhead's triumvirate of technical gurus, Alex Evans, Jean-Claude Cottier, and Scawen Roberts, have delivered a superior 3D engine, which has pushed the number of polygons available to model the central character from 600 up to 1,000 per frame, at 30 frames per second. McLaughlin rocks back and shakes his head in near disbelief: "Alex is the only programmer I've known who comes up and says 'Use more', and we're telling him we don't want that many polygons!"

Molyneux hasn't been hiring true animators as yet, although one may be added during the later stages of *Black and White*'s development to tidy up any graphical loose ends. In the meantime, Lionhead's existing art team has been trying to build their skills in that area in other ways. "We were out in the car park trying to act out the characters, because Peter said none of us are really animators, so we videoed ourselves for reference. I was trying to do the cow..." explains McLaughlin. "And he actually walked like a bad animation!" Healey chips in.



The detail levels are incredible, and are produced at a more than acceptable framerate, with realtime shadows cast by all the people and buildings

> THE DEVELOPMENT TEAM IS WORKING HARD TO FORGE THE 'WHITE' SIDE OF THE GAME INTO A WORTHY OPPOSITE TO THE 'BLACK', WITH AN ALTERNATIVE SET OF ABILITIES, ATTACKS AND SPELLS

An overall visual theme for the game isn't yet sorted, which seems curious until Christian Bravery offers an explanation: "I think at the moment we're just working and finding out what we can do with the engine. There's no point in going off at a tangent and finding that you can't put half the work in." There is work going on, however, as Healey unveils amidst his collection of books, candles and ethnic fabrics: "We're trying to make the good side look quite mystical. I'd like to see things sparkling with spiritual energy." Lionhead's ambitious programmers are clearly not the only ones with high aspirations for the game.

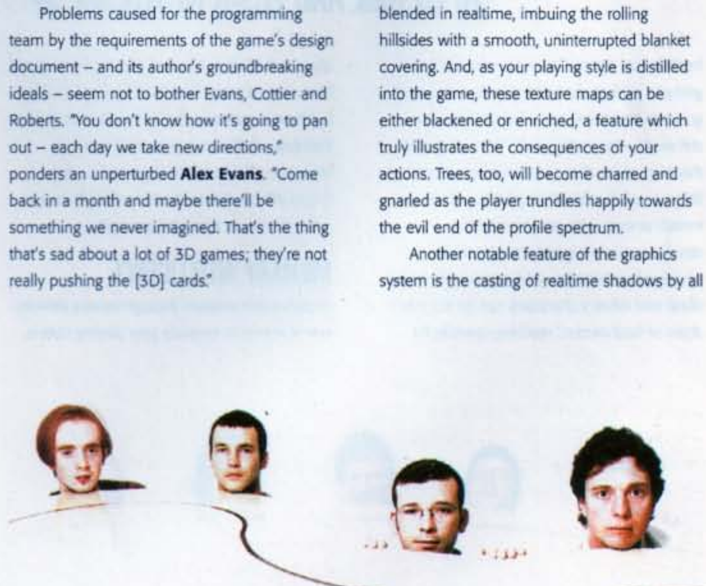
HEART OF THE MATTER

The demanding technicalities of *Black and White*'s 3D are manifold. The simple matter of requiring 30,000 polygons to draw just one of the sorcerer's creatures, and that the dozens of tribes people, their buildings and all of the trees will also be rendered with polygons, seems enough of an obstacle alone. However, drawing all those objects with triangles does have advantages over the sprites of Molyneux's past games. "The trouble [with sprites] is that you need every different type of villager, from every different type of angle, doing every different action, and every frame of that action," points out **Scawen Roberts**. "So it's a real advantage to be doing it this way."

Problems caused for the programming team by the requirements of the game's design document – and its author's groundbreaking ideals – seem not to bother Evans, Cottier and Roberts. "You don't know how it's going to pan out – each day we take new directions," ponders an unperturbed **Alex Evans**. "Come back in a month and maybe there'll be something we never imagined. That's the thing that's sad about a lot of 3D games; they're not really pushing the [3D] cards."

Starting – literally – from the ground up, Molyneux's latest game features procedural textures. These are texture maps generated and blended in realtime, imbuing the rolling hillsides with a smooth, uninterrupted blanket covering. And, as your playing style is distilled into the game, these texture maps can be either blackened or enriched, a feature which truly illustrates the consequences of your actions. Trees, too, will become charred and gnarled as the player trundles happily towards the evil end of the profile spectrum.

Another notable feature of the graphics system is the casting of realtime shadows by all



Photography: Nick Wilson

Tech gurus: (and their favourite colours), from left: Alex Evans (unknown), Scawen Roberts (green), Jean-Claude Cottier (blue) and musician Russell Shaw (black)

the inhabitants of *Black and White*'s world. "These shadows are cast perfectly," demonstrates a proud Evans. "Because every point in the land has its own texture, I can literally draw the shadows as part of the texture of the landscape. The sun will move with time, and because it's all dynamic it can redraw the shadows to move around with the sun." Watching a towering mutation of a lion slouch its way through a village shows the effect at its best; shadows curl and lick over buildings in perfect harmony with the character.

Each of the programming trio has been working on separate aspects to the engine. Roberts has been tasked with bringing Molyneux's twisting visions of creature morphing to fruition. "We can blend between a standing animation and a walking animation, so the stride actually lengthens as he goes along." Roberts is also striving to deal with the implications of the creature receiving injuries which don't entirely heal. "When you cut somebody's creature, that cut will be in exactly the right place. You can have creatures that have cuts that they had many years before, that have turned into scars," claims Molyneux.

"Of course, if you're feeding him a lot and treating him too nicely," he continues, "he's going to get lazy. And if he gets lazy then he's going to start putting on weight. The system still works – he understands that he's got all this huge mass about him." Realistic physics of this type are fast becoming flavour of the month among videogaming's leading developers, as it arguably delivers more perceived realism than a higher polygon count. *Black and White*'s characters can be set into a chain of fluid motion, reaching carefully for objects, looking at items of passing interest and labouring up steep hillsides. "They're working out how to move across the landscape; they're deciding whether to run or not," confides Molyneux. "If one of these guys lost a leg, they'd still be able to move, but they'd hop or pull themselves along the ground."



Left: This is a taster shot of what *Black and White*'s spell effects will look like. The glowing rays pulse slowly, changing colour according to the character they emanate from. The best is yet to come, however...







MOLYNEUX WANTS THE CREATURES TO MORPH FROM GOOD TO EVIL, FROM SMALL TO LARGE, FAT TO THIN, AND WEAK TO STRONG

MILITARY INTELLIGENCE

Moulding the creature through various devices and methods to embody your playing style is, insists Molyneux, "The main point of the game. You can pick up any living thing on your land, anything from a pig to a lion, to a sheep or a person – anything that's living – and you can do anything you like to this creature." But training a living animal is troublesome enough, let alone simulating its changing behaviour, its reactions, in a computer processor. There have been notable meanderings into the realm of artificial intelligence, perhaps most memorably with the *Creatures* games – simulations of fluffy mammals making their way through 'life'. Lionhead examined the first game in the series before commencing work on *Black and White*.

"We looked hard at *Creatures* when we started off because it had some of the same design aspirations that we had." With firsts in philosophy and AI, Richard Evans has views on the matter that simply cannot be ignored. "We really tried to solve the design flaws in that program. Some of the things they were doing were quite clever, but we were keen to do *some* of what they were doing, but keep it so that it's a game rather than just a screensaver."

Subtly scathing stuff, but not without reason. *Creatures* is renowned for its neural net technologies, which are intended to mimic the workings of the human mind. "Neural nets are notoriously opaque," Evans stabs. "No one, not even programmers, can understand what's going on inside them, it's just a load of numerical weights. So even when you've taught your *Creature* to do something, you can't see whether it's learned it. Its mind is totally opaque to you."







Gorilla tactics: facial animations and head tracking are intended to create believable motion



Artistic licensees: Paul McLaughlin (r10, g129, b102), Andy Bass (red), Christian Bravery (cadmium red), Mark Healey (blue), Jamie Durrant (deep shade of pink)















Even though the game's landscape, population, trees, buildings and the creatures themselves are built from polygons, the view can be scaled back to an incredible distance. From on high, the overall effect is startlingly detailed and realistic

As you might expect, the various tribes inhabit buildings of an architectural style to match their roots

Consequently, *Black and White*'s artificial animals will display their behavioural characteristics more obviously than in *Creatures*, reacting to smacks, strokes, gifts or torture in an instantly recognisable fashion. With all the other facets of Lionhead's game crying out for attention, that rapid – yet believable – response will seem entirely natural. Behavioural models are constructed around the behaviour of the selected animal, so lions are aggressive and sheep are, well, sheep. In addition, you can scoop up any of the tribespeople, before growing them into a giant with a personality to suit your requirements.

"There's a lot of feedback, so you become quite attached to your creature," says interface and AI programmer **Jonty Barnes**. "And because you take this creature on for such a long time, it really does become incredibly individual. Which I think is the beauty of it."

Barnes is responsible for realising the game's back-to-basics control system, a product of Molyneux's recently declared desire to make his games accessible to all-comers. ("*Dungeon Keeper* was icon hell," he admits. "If you want people to pick the game up and play it, that's just not the way to go.") Rather than offering you a side-panel scattered with icons, the player needs only to comprehend that most familiar of items – a hand. Floating 'National Lottery'-style above the world, this is the foundation of *Black and White*'s 'gesture system', where people, animals, spells and movements are intuitively communicated through natural movements. Do you want to cast a spell? Then manoeuvre the mouse in the direction required. Should it explode in a circle of fire? Trace out a quick hoop with the hand and your wish is granted.

> 'THE PLAYER NEEDS ONLY A HAND. THIS IS THE FOUNDATION OF BLACK AND WHITE'S 'GESTURE SYSTEM''

Other possible actions are intimated to the player through the animation of the hand onscreen – if an object can be collected, the fingers reach for it. Your creature, meanwhile, can be rewarded with strokes and chastised with slaps. Other motions of the mouse will provide shortcuts such as drawing out the letter 'H' to take the action back to your sorcerer's citadel. Barnes is planning to bury a few hidden extras within the gesture system, although understandably he's not anywhere near revealing what's going in.

ATTACKING WITH AUDIO

Music has long taken a back seat to the graphical requirements of a game. Now, as with artificial intelligence and physics programming, ingame audio is reaching a point where enough system resources can be allocated to create something beyond the norm. Unsurprisingly, *Black and White*'s audio score is way past that median point, demonstrating the benefits of yet another cutting-edge catchphrase: true, context-sensitive music.

"The piece of music that you'll hear in the background will relate the alignment [good or evil] of the land. And then all the instruments over the top can change depending on what's happening and which tribes are there," explains Lionhead muso-in-residence, **Russell Shaw**. Pause to examine the happenings at an evil Oriental village and the music will gently blend to create a suitable atmosphere. Skim across to a good Aztec settlement and the audio fades to a new sound set, extrapolated out from a matching set of melodies. "There won't be cuts in music," Shaw points out. "The same piece of music will change – suddenly the instruments will start morphing, playing exactly the same themes. Whatever you're listening to, to give you some idea of what you are looking at." For a simplified example of what to expect (if only due to hardware restrictions), Rare's recent *Banjo-Kazooie* makes for easy listening.

All of this is made possible through the judicious application of programming algorithms – code which calls up samples when and where they're required. "What we have is a way of building banks of samples, just



'Mentalists': Jonty Barnes (white; "pure serenity"), Richard Evans (red) and Mark Webley (green) are responsible for the game's AI routines

for creating atmosphere. All the programmer has to do is call this atmosphere bank, it's all done for him. It will never loop," grins Shaw. And he's not only writing all of *Black and White*'s complex score ("We're going to need about three to four thousand sound effects, which can be brought in and out," he says, seemingly unfazed at the prospect), but is also responsible for creating those algorithms. And with support for new technologies such as Creative's standard-setting Soundblaster Live! card, Lionhead's game is on course to sound as good as it looks.

NO ESCAPE

But none of the game's ambitious advances will be worth a fig if Lionhead fails to make its new project *play*. Too often, companies go blazing off on a technological rampage, forgetting that games are really all about having fun. Lionhead's forceful head of testing, **Andy Robson**, seems to have the matter well in hand, however.

"Everything should be perfect," Robson declares with a fixed stare, sending Molyneux scuttling to make a cup of tea. "If a game's designed well enough, you shouldn't even have to look at a manual. It should teach you as you go along. If you see a game that people didn't like, it's usually one that they found too difficult." To avoid this, he brings in keen work experience volunteers (**Edge** obviously attended the wrong school...) to serve as "Our fresh eyes on the game, basically. If I'm looking at a game for two years, I go blind to it." Only through a tortuous and protracted period of testing will *Black and White* hit the level of gameplay refinement Robson, Molyneux and the rest of the Lionhead team are striving for.

With online gaming's writhing cables about to reach out and potentially snare several million Dreamcast buyers, and general interest in PC network play ever increasing, Molyneux is well aware of the relevance such elements have. "The online aspect of *Black and White* is, for us, a big element of the game," he offers. Lionhead is attempting to make the transition from singleplayer to multiplayer as smooth as possible. "The game learns about you and looks at you constantly," he reveals. "And so when you go online it can find people who are compatible." In order that online players can compete fairly, the game's graphics engine is totally decoupled from its logic system, so that those with slower machines can match the 1,000MHz-PC owners who'll be around when the game is launched.

Some gamers may find the prospect of *Black and White* examining every aspect of your playing style, both overtly and through subterfuge (players will occasionally be given a stimulus, such as a village in distress, and their reaction monitored), ever so slightly unnerving. Molyneux proves such worries to be well-founded. "At the very start there won't be a computer player," he confides, "but as you play the game the water recedes and gradually introduced into that are these other characters. That's a little bit of a trick, because for the first few levels the game's looking at you and thinking what sort of computer player to put against you." Lionhead co-director **Mark Webley** adds: "We're modifying the computer player based on your personality. So we can continually tweak how it will play."







'Kong' towers above the tribespeople in this Oriental setting (main). The lion in its most twisted and evil form (top right). Daisy the cow indulges in a little Thai boxing (above right) – a little training goes a long way, it seems

> "IF A GAME'S DESIGNED WELL ENOUGH, YOU SHOULDN'T EVEN HAVE TO LOOK AT A MANUAL" Head of testing, Andy Robson

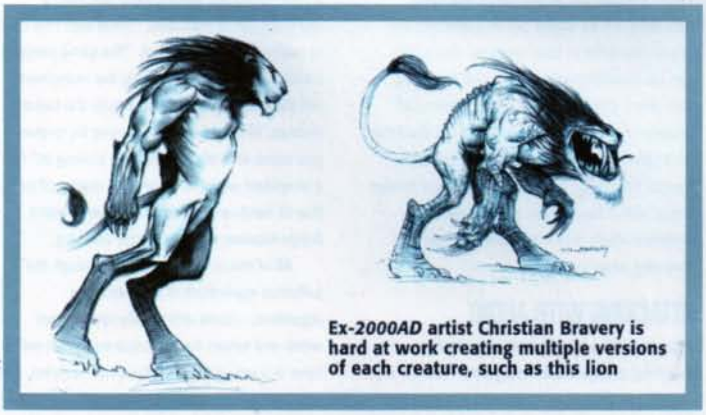
As Molyneux might say, that's "really scary stuff." If the computer can learn your playing style, won't it simply become unbeatable?

Jonty Barnes doesn't necessarily think so, only that, "It will force you to change your game," demanding that the player constantly adapts their technique. **Edge** isn't totally convinced that this meshes with Molyneux's desire to create a game playable by all.

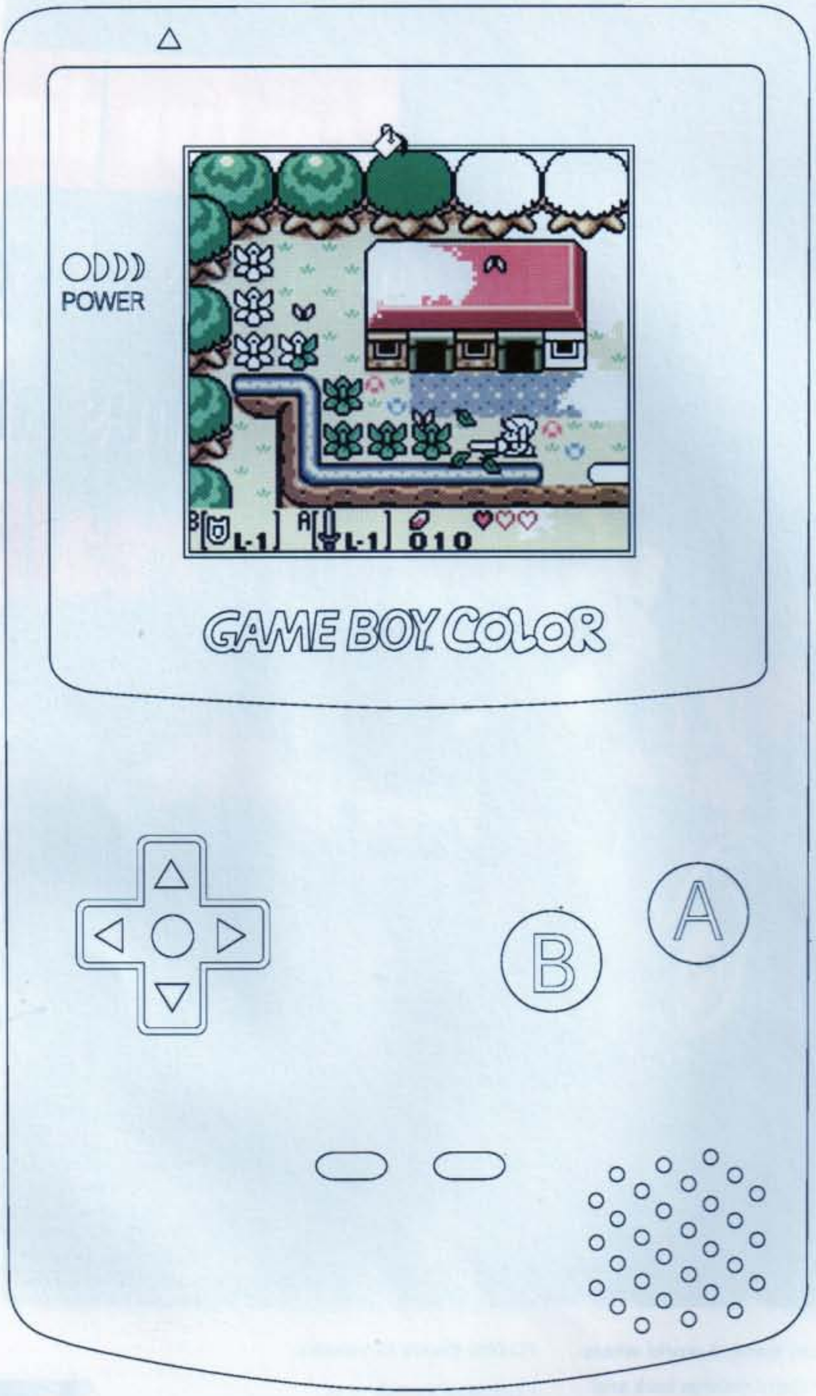
However, Molyneux is always watching, always learning, always interested in games and how people play them. "I noticed that when they play a game," he says, rolling out a red carpet to his thoughts, "some people will play one level for 20 hours. They want to get it perfect. Wouldn't it be great to have a game which caters for those people?"

So perhaps that's *Black and White*. Not a virtual pet, not a strategy game, not a game in any traditional sense at all, but something new – a game for everyone, young and old. Quick to learn, easy to comprehend, fascinating to watch and addictive to play, while simulanteously revolutionising the videogaming world.

No small feat, then...



Ex-*2000AD* artist Christian Bravery is hard at work creating multiple versions of each creature, such as this lion



pocket **battlechips**

Nintendo's decision to give its ageing Game Boy a lick of paint is one of the first assaults to be mounted in a new console war. Can bright new hopefuls from SNK and Bandai possibly hope to muscle in for a slice of the portable gaming action?

The word ubiquitous could have been invented to describe Nintendo's portable videogame system, the Game Boy. With 1997 sales figures of 500,000 units in the UK alone, the Game Boy's success is best illustrated by one simple fact: since its 1989 inception, it has become the best-selling videogame system ever created. Think big. Think 70 million units worldwide.

That it so thoroughly trounced more capable opponents is testimony to the power of the Nintendo brand, and to the democratic appeal of the Game Boy's original killer application, *Tetris* (see p77). Atari's Lynx and Sega's Game Gear may have offered colour screens, but in the late-'80s that meant dismal battery performance, which, for the kids the devices were aimed at, but the best was yet to come.

Throughout 1995, a storm had been quietly brewing in Japan's arcades, and the toy company buried within Nintendo's soul noticed. Originally created by the likes of Data East and SNK, the Print Club concept wasn't a videogame at all. The cabinet featured a digital camera linked to a high-quality colour printer and offered the simple pleasure of taking the customer's picture, augmenting it with whacked-out graphics, and then outputting it as stickers. Japanese kids, especially girls, went bonkers for it.

Nintendo took the concept and translated it for the home, and thus Game Boy Camera was born. A low-resolution, high-fun device, the Camera fits into the handheld's cartridge slot and offers multiple delights (see **E**61)

Since its 1989 inception, the Game Boy has become the best-selling videogame system ever created. Think big. Think 70 million units worldwide

meant high running costs. Coupled with retail prices that were significantly more than that of Nintendo's offering, Atari and Sega stood little chance in a market notoriously fickle about figures. Atari's famed ineptitude at marketing its products did little to aid the Lynx's cause, either.

In 1996, Nintendo demonstrated the first hint that it hadn't forgotten about its pocket-sized saviour, by creating the Game Boy Pocket. This smaller, lighter iteration boasted a much longer battery life – using AAA rather than AA cells – than the original version (now dubbed Game Boy Classic, although Game Boy Brick suddenly seemed more apt given the slender outline of its successor), and slightly larger, clearer screen. Instantly, the Game Boy was back in the public's eye, – best of all the facility to paste bulgy eyes onto your friends' faces. A thermal printer worked with the device (bringing a reminiscent tear to the eye of many ex-ZX Spectrum owners), capable of issuing the Camera's snaps, and the upshot for NCL (Nintendo's Japanese HQ) was another worldwide hit.

But the company wasn't finished with the Game Boy yet. With the N64 foundering in its crucial home territory, Nintendo's handheld, through the Camera and the phenomenally successful *Pokemon* series of games (essentially virtual pets), was fast becoming its financial lifeline in Japan. Technology had moved on in the nine years since the Game Boy was launched, allowing a major update to be introduced – one which gamers had always hoped for: a colour display.

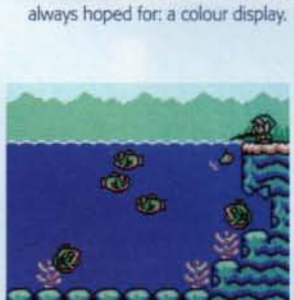




NINTENDO GAME BOY COLOR

Aside from its impressive new 256x256-pixel colour display, capable of displaying up to 56 colours simultaneously (24 for sprites, 32 for backgrounds) from a palette of 32,000, the 78x135x27mm Game Boy Color has an 8bit processor twice the speed of the original. Other features include a new infrared comms port, allowing for multiplayer gaming (although the infrared range is limited). There's also backwards compatibility with all Game Boy titles. Software will be released in three formats: monochrome, dual mode for both Game Boy and Color, and Color only. European pricing is set around the £70 mark.







Bolstered by the furore surrounding *Zelda*'s triumphant return via the Nintendo 64 (see p84), interest in the updated Game Boy Color version of *Link's Awakening* should be high – from both casual and serious gamers

First revealed at this year's E3 show in Atlanta, the Game Boy Color (forgive the Americanism) features a crisp 256x256 pixel TFT (thin film transistor) display – a marked improvement on the old monochrome screen. Backed by a software line-up consisting mainly of coloured updates of past hits, including the evergreen *Tetris* and *Zelda: Links Awakening*, the new machine is an attractive prospect. Early indications from Japan are that Nintendo's wünderkind is outperforming all sales expectations, disappearing from retailers' shelves as fast as they are put there.

Now, it would be easy to think that as far as the portable games market is concerned, the story is over. The Game Boy phenomenon continues with a powerful new product – no company would be foolish enough to challenge the might of Nintendo in this market, would it? Enter SNK and Bandai, creators of the Neo Geo and Tamagotchi respectively, with two products of considerable appeal – the Neo Geo Pocket and WonderSwan, backed by reputations that cannot be ignored. Throw Sony's PocketStation and Sega's VMS (memory cards with displays and D-pads) into the ring, and suddenly the contest comes alive. Just as the home console market is about to witness a fresh hardware war, portables have commenced their own pocket-sized ruckus that will bring fresh innovation to the games market.

Portables have commenced their own pocket-sized ruckus that will bring fresh innovation to the games market

The newcomers

Of Game Boy Color's direct competitors, SNK's Neo Geo Pocket has made it to market first. Bearing little relation to the company's one-time console heavyweight other than the Neo Geo name and a few game brands, the handheld is nonetheless a powerful unit. In fact, both the Neo Geo Pocket and Bandai's WonderSwan share remarkably similar hardware specifications: both have 16bit processors, eight-shade monochrome LCDs, weigh 130 and 110 grams respectively, measure within millimetres of each other and consume batteries in around 25 hours. However, Japanese pricing is rather different, with SNK asking ¥7,800 (£40) for its unit, and Bandai planning to retail its WonderSwan for only ¥4,800 (£25).

With the two handhelds so evenly matched, Bandai's lower pricing may be enough to win consumers' attention, particularly given the broad church of development support that WonderSwan has gathered. Namco, Taito, Capcom, Sunsoft and Koei are among the Japanese software partners committed to creating titles for Bandai's unit, lining up versions of *Klonoa*, *Densha de Go!* and *Pocket Fighters*. SNK, meanwhile, has always been more reliant on its



SNK NEO GEO POCKET

Available in a range of colour schemes that include hip camouflage patterns, the Neo Geo Pocket is similar in size to the WonderSwan, although its 160x152 resolution is smaller than that of Bandai's unit – and the original Game Boy. It can display eight shades of grey on its monochrome screen, while a colour display version is in the offing. Battery life is over 20 hours, however, and unusually for this market, a stubby control stick features on the Pocket. Interestingly, a link cable will be available to connect the unit to Sega's new Dreamcast console, although whether it will offer more functions than Sega's own VMS device isn't known. A European release is thought to be imminent, with pricing nearer to Japanese (£40) than grey import (£80) levels.



SNK's presentation at the Tokyo Game Show was a fairly muted affair, although public reaction to the software line-up, particularly *Neo Geo Cup '98*, was good





Neo Geo Pocket's screen, while not offering a particularly high resolution (only 160x152), is nonetheless sharp and clear, much like the Game Boy Pocket. The range of software includes the dynamic *King of Fighters R1*

own range of titles (often a questionable policy), and consequently Neo Geo Pocket has launched with several SNK-developed titles. *King of Fighters R1* and *Neo Geo Cup '98* have both been warmly received, and the forthcoming conversion of the arcade hit *Metal Slug* will no doubt do much to raise the Pocket's profile.

Software for Game Boy Color is a rather different story, however. As could have been expected, both Nintendo and western thirdparty publishers are supporting the unit heavily. The response from Japan, particularly in light of WonderSwan's hefty line-up of developers, seems remarkably muted. However, the lack of titles from the east can be explained, at least in part, by the number of western programmers experienced in coding for the Game Boy's Z80 processor. Nintendo stalwart Rare has been regularly advertising for Game Boy Color software engineers for some time now, and while only *Conker's Twelve Tales* has so far been announced, more titles are guaranteed to follow. A new instalment in the *Donkey Kong Country* series seems certain, along with a smattering of other character-driven titles Other publishers so far confirmed for Nintendo's team include Infogrames, Midway, Acclaim and GT Interactive.

Go west

By the time you read this, Nintendo of Europe will have launched the Game Boy Color to a doubtless rapturous reception. Certainly, if the reaction from consumers is anywhere close to that in Japan, then THE in the UK will have little difficulty shifting its allocation by Christmas. Initial Japanese sales have run into the hundreds of thousands, resulting in NCL ramping up production to sate a worldwide demand estimated to hit one million units per month.

"We are ordering in 220,000 for launch," reveals THE Games managing director, **Dick Francis**, "and expect to be in a sell-out situation by Christmas, plus we have a further 200,000 on order for the New Year."

While it's questionable how many are still in active use, the UK alone boasts an installed base of 3.5 million Game Boys, with a further 750,000 sales projected for 1999. As far as the possible challenge presented by the WonderSwan and Neo Geo Pocket, Francis is unflustered. "People are not going to go out and spend money on another monochrome system when they can buy one in colour," he believes. "The reason they are still launching monochrome systems is simply because they are not as technically advanced as Nintendo," he claims, "and have not been able to offer significant battery life as well as the colour screen."

The lure of a powerful monochrome system may be strong enough to ensure success if the available software is of sufficient quality – at least that's the gamble that SNK Europe is about to make. According to manager **Kenji Teranishi**, the European division is preparing to launch the Neo Geo Pocket imminently. "We are now scheduling to release the English version at the end of this month [November] or the beginning of next month [December]," he reveals. Although pricing hadn't been set at the

The lure of a monochrome system may be enough if the software is of sufficient quality – at least that's the gamble that SNK Europe is about to make



BANDAI WONDERSWAN

Launched at October's Tokyo Game Show, Bandai's oddly named contender holds the notable distinction of having been originally designed by the late Gumpei Yokoi, creator of the Game Boy. The unit contains several technological highlights, including a 3MHz 16bit CPU, the ability to run for 30 hours on a single AA battery and four-channel stereo sound. While its screen is monochrome, it displays eight shades of grey and has a reasonable 224x144 resolution. Notably, the dual D-pad controls mean that the WonderSwan can be used in either portrait or landscape orientations. The unit's overall size is 74x121x24mm, making it fractionally smaller than the Game Boy Color. Japanese retail cost is set at ¥4,800 (£25) for its March '99 release.



SEGA DREAMCAST VMS

Rather than offering a basic memory card system for Dreamcast, Sega decided to add a screen and D-pad to create its Visual Memory System (VMS). While the device will enable multiple virtual pet applications, Tamagotchi-style (two VMSs can be directly connected), the facility to slot the VMS into Dreamcast's controllers brings interesting new possibilities for game design. The unit's 48x32-pixel LCD can give each player an individual screen, which opens up interesting gaming possibilities (a motion detector in a firstperson shoot 'em up, for example). However, given the VMS's diminutive 47x80x16mm dimensions, its appeal in the virtual pet scene cannot be underestimated.





SONY POCKETSTATION

Similar in concept to Sega's VMS, the PocketStation is essentially a souped-up version of the PlayStation's existing memory card. Offering an even smaller LCD than Sega's VMS (only 32 pixels square), PocketStation's USP is its infrared communication capability. More so than the Dreamcast VMS, Sony's ¥3,000 (£16) RISC-chipped device is targeted at the ever-popular (at least in Japan) virtual pet market. PocketStation software will be delivered via PlayStation software and downloaded into the unit's 128Kb Flash RAM. The list of compatible software announced to date includes high-profile titles such as *Street Fighter Zero 3, Final Fantasy VIII* and *Crash Bandicoot: Warped.*



One of the most promising facets of Sega's new VMS is the ability to transfer information between Dreamcast and its arcade relative, the Naomi board

time **Edge** went to press, a point well below the grey-import £80 level is likely.

While sharing a similar launch date to Game Boy Color, SNK doesn't see the Pocket as a direct competitor to Nintendo's offering. Instead, in Japan at least, Bandai's WonderSwan is seen as the enemy, particularly given its relatively low price.

Speaking to Bandai UK product manager **Darrell Jones** reveals that SNK's aims may not be too difficult to meet. "There are no plans [for a European launch of WonderSwan] at the moment. We'll sit and wait and see how it does in Japan," he candidly admits. "They're not really talking about a western release until the year 2000."

With WonderSwan not set to hit Japanese retail until March 1999, its ultra-low pricing and strong software line-up suddenly seem less crucial, particularly if SNK can deliver enough quality titles for the Neo Geo Pocket and Nintendo continues to shift its Game Boy Colors by the truckload. However, Bandai's vast experience of the UK and international games markets cannot be underestimated; aside from its multiple Japanese videogame and toy arms, the company formed a distribution partnership here with Nintendo in the early-'90s.

Jones doesn't believe that the WonderSwan's monochrome screen will handicap it in the contest with Game Boy Color. "When you think about it, it's taken Nintendo nine years to release a colour version," he points out, going on to imply that, if the Game Boy has reached the 70 million sales mark with four shades of grey, why shouldn't WonderSwan succeed when it comes armed with a better display than Nintendo's original system and a pocket-money price point?

Game Boy reached the 70 million mark with four shades of grey – why shouldn't WonderSwan succeed with a pocket-money price point?

Street fighters

In the final reckoning, it's clear that Nintendo is in an overwhelmingly strong position – as Dick Francis points out, Game Boy holds a 99 per cent market share. The Color iteration is already selling strongly in Japan, while its competitors have yet to find their feet. But any pundit could predict that the new Game Boy would succeed; it's the WonderSwan and Neo Geo Pocket that are the gambling man's choices.

On the face of it, Bandai's impulse-purchase price point and developer support make WonderSwan the winner, but it's months away from a Japanese launch and years from any western appearance. Which leaves SNK a neat window to get the Neo Geo Pocket noticed, gather together software support, and make its baby console a success.

Ultimately, though, it's unrealistic to suggest that either company can come anywhere near Nintendo, whose Game Boy technology ultimately remains more important to the company than its Nintendo 64 console.

Color highlights

A selection from Nintendo's forthcoming GBC line-up




Link's Awakening

Likely to sell substantially more than a handful of miniature cartridges, Link returns in a colour re-release of the hugely popular *Legend of Zelda*. Look out for an extra, completely new dungeon.



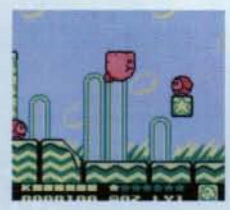

Wario Land II

Weighing in at 8Mbits, this will be one of the biggest carts to be released for a Game Boy system. Fifty-two levels stuffed with coins and puzzles make up the typically Nintendo action.




Metroid II

Subtitled *Return of Samus*, this has more in common with the NES original than the classic SNES *Super Metroid*. It remains one of the more enjoyable GB action-platformers, though.

Dream Land 2

Those left wondering just when exactly Nintendo is going to finally finish its N64 *Kirby* title may be appeased by this lightweight platformer, packed to the gunwhales with cute.




Pokemon

One of the titles responsible for fully revitalising interest in the Game Boy, it will be interesting to see how this RPG-styled affair fares in Europe, after its huge success in Japan and the US.



Mortal Kombat 4

The series may have long since run out of steam, but the fourth instalment is still getting the 8bit treatment. Presumably the game's designers will be fully utilising the GBC's red hues.



Rampage WT

Having failed to capture the imagination of N64 and PlayStation owners with this update, Midway is chancing its arm with portable gamers. Maybe they're an easier target.



Spy Hunter

The classic all-action coin-op from Sega should make an interesting GBC title. Smooth, fast scrolling is a must – not forgetting the atmospheric tones of the Peter Gunn Theme.



San Francisco Rush

Of all the Game Boy Color titles so far announced, this should be the title that pushes the system to its furthest. Early screenshots hardly inspire any amount of confidence, though.



Moon Patrol

Another old-school arcade game gets dusted down and stuffed into the GBC's diminutive casing. *Moon Patrol* may be simple stuff, but it retains an oddly addictive charm.

And the competition...

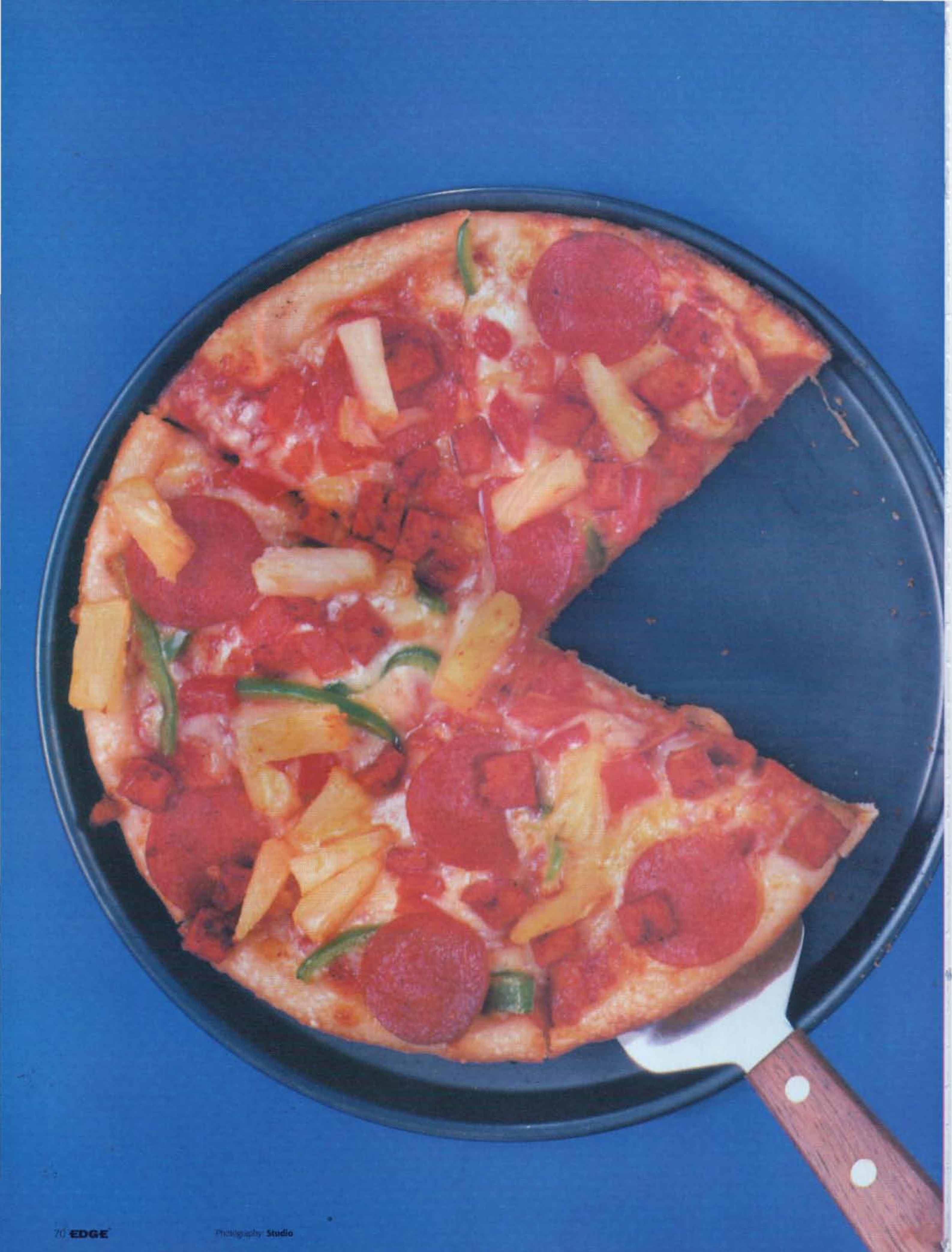
Japanese software schedules, by title, publisher and genre. (All details are subject to change.)

Neo Geo Pocket

Baseball Stars	Saurus	Sports
Biomotor Unitron	–	Action RPG
Dokodemo Mah Jong	ADK	Board
Fatal Fury series	SNK	Fighting
Flying Power Disc	SNK	Sports
King of Fighters RPG	SNK/Sega	RPG
Last Blade	SNK	Fighting
Magical Drop	SNK	Puzzle
Melon-chan no Seichou Nikki	ADK	Simulation
Metal Slug series	SNK	Action
Mortal Kombat	–	Fighting
NBA Hangtime	–	Sports
Neo Baccarat	–	Card
Neo Cherry Master	–	Gambling
Neo Derby Champ	–	Sports
Neo Dragons Wild	–	Card
Neo Mystery Bonus	–	–
Neo Geo Cup '98	SNK	Sports
NFL Blitz	–	Sports
Passive Sonar	–	Action RPG
Pocket Fighting series	SNK	Fighting
Pocket Tennis	Yumekou	Sports
Samurai Spirits series	SNK	Fighting
Shogi no Tetsujin	ASK	Board
Tsunagete Pon	Yumekou	Puzzle

Wonderswan

Nobunaga's Ambition	Koei	War
Chaos Gear	Bandai	Sim
Chocobo's Magic Dungeon	Bandai	RPG
Clock Tower	Human	Adventure
Cruze Last Stand	Bandai	Sim
Densha de Go!	Taito	Sim
Decotora	Human	Racing
Digital Monsters	Bandai	Sim
Famista	Namco	Sports
Flash Nanpa no Tetsujin	Kobunsha	Sim
Gunpey	Koto	Puzzle
Kikuchi Hideyuki no Card Battle	Kobunsha	Card
Klonoa	Namco	Action
Kosodate Quiz My Angel	Namco	Quiz
Neo Genesis Evangelion	Bandai	Sim/RPG
Nice Shot	Sammy	Sports
Ninja Jajamaru-kun	Jaleco	Action
Pocket Fighters	Bandai	Fighting
Pro Wrestling	Human	Sports
Puyo Puyo Tsu	Bandai	Puzzle
Puzzle Bobble	Sunsoft	Puzzle
Radar Game	Sammy	Board
Romance of the Three Kingdoms	Koei	War
SD Gundam	Bandai	Sim
Shanghai	Sunsoft	Board
Side Pocket	Data East	Sports
Space Invaders	Sunsoft	Action
Super Robot Wars	Banpresto	Sim/RPG
Tekken	Namco	Fighting
Tokyo Majin Gakuen Fujufuroku	Asmik	Sim
Toryumon	Sammy	Board
Toukon Retsuden	Tomy	Fighting
Tsuri ni Ikou!	Coconuts	Fishing
Vaitz Blade	Bandai	RPG



Photography Studio



Food for thought

What has pizza got to do with videogames? (Apart from being the staple diet of those who make and play them.) Well, it was only the inspiration for one of the most important developments in videogame history...

The history of videogames is punctuated by a few moments when the direction of the entire industry hinged on a single decision, a lucky accident, or a strange combination of both. If anything, these snapshots prove that no event is without consequence, that the noblest of intentions can fall short, and that the basest motivations can benefit others in unexpected ways.

Arriving at the idea to design a videogame character after eating pizza with friends may not be a usual occurrence for designers, but in one instance the specific presence of the pizza itself inspired designer Toru Iwatani to create Pac-Man, the first ever recognisable game character. The point here is that although often small and seemingly insignificant at the time, these moments sent ripples throughout the gaming world and, in some significant way, things were never the same again...



(The Genesis of Sega) 1954



David Rosen, the father of arcades in the west

The moment: David Rosen decides to start fixing Pachinko machines.

The story: At the end of his stint in the Korean War, David Rosen returned to Tokyo to try out a business idea. At the time, occupied Japan required a photo ID card for almost everything – rice ration cards, railway cards, employment cards, etc. Getting photos, however, cost ¥250 and took three days. Starting in 1954, Rosen imported instant photo booths, charged ¥200, and made a mint. Looking to expand his business, he started repairing Pachinko machines (an obvious step, since he needed technicians to fix broken photo booths anyway). Some replacement Pachinko parts came back stamped SE GA, for Service Games, the name of his Pachinko operation, and one of the greatest arcade companies in history was born.

The fallout: As a result of his Pachinko operation, Rosen began importing penny arcade games from the US. When duties became too high, he started producing games locally, eventually exporting them to the States. He sold out to Gulf & Western in 1969, and when Gulf & Western decided to liquidate the company in the mid-'80s, was part of the management buy-out that obtained Sega's Japanese operations. (Incidentally, the fact that a westerner started Sega is virtually unknown in Japan…)

(Liar, Liar) 1972

The moment: Nolan Bushnell launches the videogame industry with a series of fibs.

The story: Shortly after hiring Al Alcorn as his company's first engineer, Atari founder **Nolan Bushnell** came up with a project. He told Alcorn that he had just signed a contract with General Electric to design a home electronic game based on ping-pong. The game would be very simple: "One ball, two paddles, and a score… nothing else on the screen."

This was a lie. In fact, he had not signed a contract with General Electric or even had any kind of discussion with the appliance company. The truth was that he wanted to get **Al Alcorn** familiar with the process of making games, and this was the simplest idea he could think of. "He didn't even think it had any play value," Alcorn says.

A few weeks later, Bushnell flew to Chicago to sell *Pong* to Midway or Bally. Meanwhile, the first prototype of *Pong*, which was at a bar called Andy Capps Tavern, had stopped working, and when Alcorn went to investigate, he discovered that the coin-storage box was overflowing with quarters. He subsequently called Bushnell.

Flushed with success, Bushnell immediately decided he should manufacture the game himself. The problem was, after their first set of meetings, executives at both Bally and Midway expressed interest in buying *Pong*. Now he had to find a way to steer them away while keeping the door open for future projects. So, he told another lie and played one side against the other, telling Bally that Midway didn't want it. When Bally heard this, the company decided it must be a bad investment and dropped its offer, so Bushnell could then (with a clean conscience, even) tell Midway that Bally wasn't interested, ending that business deal.

The fallout: Nolan Bushnell and Atari were left with a guaranteed hit on their hands. *Pong* conquered the arcades, giving Atari the capital and brand-name buzz to design and market home versions, eventually leading to the Atari VCS and the birth of home consoles.





Atari founder, Nolan Bushnell

(Valentine's Day 1976)

The moment: Don Valentine learns the number of ham radio operators in America.

The story: Don Valentine is the dean of the Silicon Valley venture capitalists – his first deal in the business was financing Atari. A few years later, Atari founder Nolan Bushnell hooked Valentine up with Steve Jobs, a young Atari employee who at the time was designing a new computer with his friend **Steve Wozniak**. After some conversation, Valentine agreed to visit Jobs' garage and see the computer they were building.

He was not impressed by the technology. "He said, 'The technology doesn't matter as much as marketing considerations,'" says Wozniak. "I said we could sell a million units." Wozniak's logic? There were millions of ham radio operators, and his computer would be "bigger than ham radio." Although Valentine didn't quite approve of Wozniak's methodology, he did eventually buy into the company.

The fallout: Obviously, this was the beginning of Apple Computer, which would dominate the home computer market in the US throughout the early-'80s and become the first system many game programmers ever worked with.



Apple founder, Steve Wozniak

(Party of Four 1979)



Al Miller's Activision *Ice Hockey*



Atari's legendary 2600 console

The moment: Alan Miller, David Crane, Bob Whitehead, and Larry Kaplan decide they want recognition from Atari.

The story: Atari, for reasons **Edge** will charitably chalk up to discredited management ideas, offered its star programmers and designers working conditions that had more in common with New York sweatshops than Silicon Valley startups. Programmers were underpaid, their work was never publicly acknowledged, and they generally were treated like, well, dirt. By 1979, four Atari 2600 programmers had had enough. "I put together a closed contract based on contracts I had read for writers and musicians," recalls **Alan Miller**. "At some point Larry, Dave, and Bob became aware of what I was doing, [and] the four of us became a group." Management balked at their demands, and the four walked out, reappearing as Activision, a company designed to produce software for the 2600. Atari sued, Activision won, and the thirdparty software system was born. Within a year, Activision had surpassed Atari to become America's fastest-growing company.

The fallout: Today a world without thirdparty publishers is inconceivable (except, maybe, when Nintendo systems come into consideration). Although lockout chips and licensing schemes keep consoles from being completely open systems, the presence of competing software publishers means that developers no longer get routinely screwed, gamers get a wider variety of titles, and everyone is (a bit) more honest. Incidentally, Atari apparently failed to learn its lesson: the company's efforts to keep its home computers closed to thirdparties helped ensure the success of the totally open Apple II.

(Pizza Delivery) 1980


Pac-Man

The moment: Toru Iwatani finds his gaze attracted by a partially eaten pizza and creates one of the most important characters in game history.

The story: Shortly after graduating from college in 1977, **Toru Iwatani** joined Namco. He wanted to create pinball tables, but Namco had moved full steam into videogames. Iwatani compromised and started creating video pinball games like *Gee Bee*, *Bomb Bee*, and *Cutie Q*. In 1979, Iwatani decided to create a 'real' videogame, but one with a twist: "I was interested in developing a game for the female game enthusiast. I started out with the concept of eating and focused on the word 'taberu,' which means 'to eat.' The actual figure of Pac-Man came about as I was having pizza for lunch. I took one slice away, and there it was, the figure of Pac-Man."

The fallout: *Pac-Man*, the first game to feature an animated character and cut-scenes, sold more than 350,000 units – making it by far the most successful arcade machine of all time. Much of its success was thanks to Pac-Man himself who, as last month's A Question of Character feature confirmed, was the first true videogame character. His contribution to videogaming is still prevalent today, as the success of personalities such as Mario and Lara Croft testifies.

(The Birth of Mario) 1981

The moment: Nintendo loses the 'Popeye' license.

The story: To Hiroshi Yamauchi, president of Nintendo Co Ltd., breaking into the American arcade market in the late-'70s proved a baffling experience. His American office reported failure after failure. *Space Fever* did not attract business, while arcade owners did not like *Sheriff*. His American sales team was only able to sell 1,000 units of *Radarscope*, a game that was highly popular in Japan and that Yamauchi hoped would take America by storm. If he was going to establish Nintendo in the west, he would need something that was not only original and fun, but also appealing to Americans.

Fortunately, Shigeru Miyamoto, a young college graduate with a degree in industrial design, whom Yamauchi hired in 1977, was working on a game based on an American icon: Popeye. This was to be Miyamoto's first game, but shortly after the game was scripted, King Features pulled the rights to its character.

Desperate, Yamauchi called Miyamoto to his office and told him to design a new game based on Miyamoto's own ideas. Ironically, years later, Miyamoto got the opportunity to create a game based on Popeye; but the character he created then, in Popeye's place, became the symbol of videogaming around the world: a pudgy little carpenter originally named Jumpman, who later became a plumber named Mario.

The fallout: In 1981 *Donkey Kong* became an international hit, but more importantly, Shigeru Miyamoto was now officially a game designer, and on his way toward creating some of the most memorable characters and games the industry has known.


Mario


Shigeru Miyamoto

(The Odd Couple 1982)

The moment: Sid Meier beats Bill Stealey at a game of *Red Baron*.

The story: General Instrument Corporation held company meetings in Las Vegas in 1982. While attending these meetings, a young programmer named **Sid Meier** met a salesman named Bill Stealey, and they struck up a friendship. Meier talked about ideas for making computer games, and Stealey talked a lot about being a pilot. When a lecture they attended became too dull, they cut out and went to a videogame arcade in the MGM Grand hotel. There they found an Atari *Red Baron* machine.

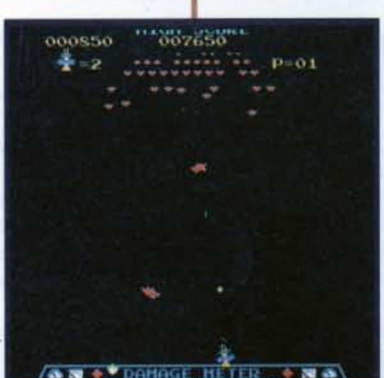
Meier humiliated Stealey. "I bet him a quarter for the next game that I could beat him at *Red Baron*," Stealey recalls, "so we played and I went first. I flew it like a fighter pilot, flying past enemy planes, then coming around and getting them. I beat the high score, then Sid went on and nearly doubled my score. He said that *Red Baron* was not a bad game, but that it had a couple of problems. Now, he had already shot my pride by beating me, so I said, 'Okay, you make a better game and I'll sell it.'"

The fallout: The company they founded was Microprose. Sid Meier went on to make a substantial number of games that were better than *Red Baron*, and Bill Stealey sold them worldwide. Their long string of hits included *Civilization*, one of the most enduring and influential games of all time.



Microprose co-founder, Sid Meier

(The One That Got Away 1983)



Radarscope



NCL president, Hiroshi Yamauchi

The moment: Atari fails to return Hiroshi Yamauchi's calls.

The story: One of the lessons Hiroshi Yamauchi learned from *Radarscope* was that success in Japan did not necessarily translate into success in the west. The 1983 launch of the Famicom was an unqualified success in Japan, but both Yamauchi and the Nintendo of America team doubted they had the marketing clout to launch the system in the States. Deciding that it needed a partner to represent the Famicom in America, Nintendo turned to Atari.

At Yamauchi's suggestion, Nintendo of America vice president Howard Lincoln contacted Atari. When Lincoln suggested the partnership, he told Atari president Ray Kassar that he had been authorised to offer Atari a license to sell the Famicom internationally in every market except Japan. In exchange for allowing Atari to sell the system under its own label, Nintendo would receive royalties on every unit sold and have unlimited access to sell software for the system.

Kassar asked for a meeting, and Lincoln and Minoru Arakawa received the royal treatment during their visit to Atari. However, after three days of demonstrations and haggling over prices, back in Japan Yamauchi was getting annoyed with all the delays. Eventually, however, they struck a deal.

Unfortunately, the deal never went through. After a dodgy stock sale, Kassar left Atari in disgrace, and Atari turned down Nintendo's offer shortly after. Today, neither Lincoln nor Arakawa believe Atari ever really wanted the system, and some observers believe negotiations on Atari's part may in fact have been a simple delaying tactic – at the time, the company was working on the 7800 console.

The fallout: Angered but not dissuaded, Yamauchi decided to have Nintendo of America launch the Famicom in the US all by itself, a decision made even easier as Atari continued to fall apart over the next two years. Within 14 months of its nationwide launch in 1986, more than a million NES units had been sold, and Nintendo was well on its way to becoming a household name and industry monolith. Atari Corporation never again had a home hit and folded in 1996.

(The Slam Dunk 1984)

The moment: Trip Hawkins realises he's six degrees of separation away from basketball legend Dr J.

The story: In 1984, Electronic Arts decided to experiment with using sports stars' images in its games. As it happened, then-EA-president **Trip Hawkins** had a friend who had a friend who knew the agent handling Philadelphia 76ers' basketball star, Julius 'Dr J' Irving. So Hawkins asked Irving's agent if his client would be willing to let EA use his name and likeness in a computer basketball game.

This was the first time a computer game company licensed an athlete's name. Mattel had licensed such sports organisations as the NFL and the NBA, but no one had ever approached the athletes themselves. Electronic Arts paid Irving a $25,000 fee for his name and image. "Anyway, he agreed to do it, making it possible for us to have Dr J's agent ask Larry Bird's agent, 'Why don't you do it and on the same terms [as Dr J]?'" says Hawkins. "Of course, you'd be lucky to do anything like that today for even ten times that amount," Hawkins laughs. The final game, programmed by Eric Hammond (now VP of product development at Sega), was called *Dr J and Larry Bird Go One-on-One*.

The fallout: The title was a huge commercial and creative success, drawing in droves of fans who had never before played a sports game, or any game. It launched EA's sports division (it wasn't too long before Hawkins made a call to John Madden's people), and it was the first step towards more realistic sports simulations. It also established the need for all sports games to have recognisable licenses. Today, sports licensing is almost as ubiquitous as the option screen (gamers can hardly have failed to notice Michael Owen's attachment to *World League Soccer '99*, for example), EA Sports is still number one overall, and huge numbers of gamers who would never have been attracted to EA's 'Little Pixel Men Go One-on-One' are now dedicated sports game addicts.



The mastermind behind EA's sports division, Trip Hawkins



Dr J and Larry Bird Go One-on-One

(Dial 'M' for Molyneux 1985)

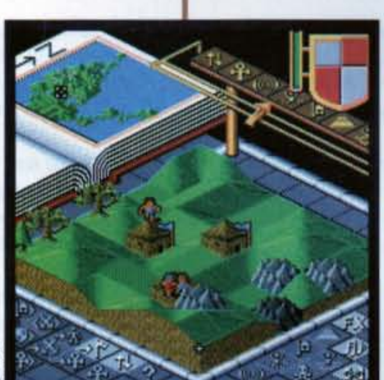
The moment: An executive at Commodore dials the wrong number, and Peter Molyneux runs with it.

The story: In the mid-'80s, **Peter Molyneux** was running a software company called Taurus, which was small, underfunded, and struggling. Then one day, out of the blue, a European executive from Commodore Computers called him up and told him, "We'd really love you to put your product on our machines. Could you come for a meeting?"

At the time, Commodore was huge, marketing the highly successful Commodore 64 and getting ready to launch the Amiga (which would also become massive in Europe), so naturally Molyneux took the meeting. "He was talking about the Amiga and what a wonderful machine it was going to be and how it was going to be sold in the tons," Molyneux recalls. "He kept on saying how he expected our product to come on to the machine. He kept on calling it 'our product.' I said, 'Oh, yes. We will be very excited to do that. We'll put all of our resources into getting out our product.' Neither of us were talking specifically about what 'it' was."

As the meeting concluded, Commodore agreed to send five top-of-the-line Amigas to Molyneux's office, and that was when he realised something was wrong. "He phoned the wrong Taurus," Molyneux explains. "He had phoned us instead of 'Torus', a company that did network cards. All the time he thought we were going to put network cards on to the computer. Well, we weren't." Still, Taurus desperately needed the hardware, so after a brief 'crisis of conscience', Molyneux kept quiet and accepted the machines.

The fallout: The first god game, *Populous*, and every groundbreaking and influential title Molyneux has worked on since. "That got us into computer games," he says, simply, "because if we hadn't had those Amigas, we would have never made the leap."

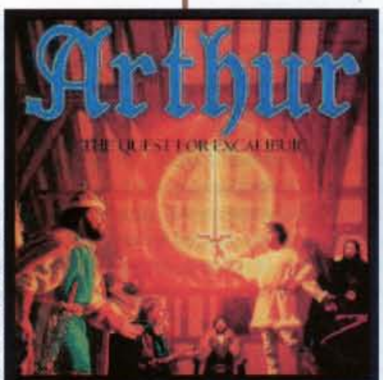


Populous



Peter Molyneux

(Mort D'Arthur) 1985



Arthur: The Quest For Excalibur



Zork

The moment: Infocom releases *Cornerstone*.

The story: Infocom was formed in June 1979, in Massachusetts, USA by a group of people who met at the MIT artificial intelligence lab. The group's first commercial product, the seminal adventure game *Zork*, which enabled keyboard input in plain English, became an unqualified success. In the wake of its overwhelming popularity, the company released nothing except games for the next five years, solidifying the adventure game genre with sequels to *Zork* and other classics like *Planetfall*, *Trinity*, *Lurking Horror*, and *A Mind Forever Voyaging*.

Still, the lure of the lucrative business products market was strong, and in November 1984 the company announced *Cornerstone*, a relational database. Released in early 1985 for $495, the product bombed in spectacular style. "We hired a lot of people who were committed to *Cornerstone*'s success," said game designer **David Lebling** (*Zork*, *Lurking Horror*) in 1990. "But if *Cornerstone* failed, they didn't care if it took the rest of the company down too." Which is exactly what happened. By September 1985, there were *Cornerstone*-driven layoffs, and in February 1986, the company had no choice but to merge with Activision.

The fallout: After a management shake-up, Activision became Mediagenic, and Infocom was shut down for good in mid-1989. Companies fail all the time, but Infocom's demise marked the end of an era, and may indeed have marked the effective end of a genre. The company's focus on interactive technology, not graphics, meant that its games were the most interactive and immerse adventure games ever. Even to this day, ten years later, no commercial product has approached the depth of interaction that existed in *Arthur*, the last Infocom game. Most subsequent commercial adventure games have focused more on graphics technology than on interaction. Pundits who are pondering the moribund adventure genre need look no further than the death of Infocom for a good cause.

(Blocked) 1989

The moment: Nintendo realises the difference between a console and a computer.

The story: The rights to *Tetris* were carved up and sold off like a side of beef. Robert Stein of Andromeda originally bought the computer rights from creator Alexey Pajitnov, which he divided between Spectrum Holobyte and Mirrorsoft. Mirrorsoft then sold the American coin-op rights to Atari and the Japanese coin-op rights to Sega. In the meantime, Nintendo realised that owning the rights to computer versions didn't preclude it from securing the rights for consoles. The company figured that *Tetris* would make an ideal killer app for the Game Boy and quickly swung a separate deal.

Atari, believing it had the right to make *Tetris* cartridges, made an exceptional NES version of the game, and was promptly sued. In court, Atari claimed that the NES was really a home computer since Nintendo had announced its intention to market a keyboard and disk drive for the system. Nintendo argued that the NES, like the Game Boy, was a games console. Nintendo won. Atari was forced to warehouse its superior version of the game. Some 263,000 Tengen (the brand Atari used for its cartridge games) *Tetris* cartridges were destroyed.



Game Boy Tetris

The fallout: The keyboard and disk drive never shipped for the NES (although the drive did ship in Japan). More importantly, however, no other single game has been more responsible for a system's success than *Tetris* has been for the Game Boy. Still going strong after ten years on the market and making the leap to colour, the Game Boy is the most successful game platform in history and has crushed all competitors, superior and inferior. In Japan, Game Boy today accounts for the greatest portion of Nintendo's profits.

(Doomed to Success) 1990

The moment: Jon Romero discovers that most of his fan mail is from one person using different names.



Author of *Pyramids of Egypt* and id founder, Jon Romero



Fellow id partner, John Carmack

The story: The story is best told by the man who wrote those letters – **Scott Miller** of Apogee and 3D Realms: "Back in 1990, I was doing shareware games and doing well at it. But it was hard to run a company and make games, so I decided to recruit other authors whose games would be released through Apogee. I noticed that on Soft Disk, there were quite a few nice arcade games that would be perfect for the model.

"I found out that Jon Romero was the author of one – *Pyramids of Egypt*. I also did stuff for Soft Disk, and I knew it was very strict and wouldn't allow me to contact Romero, so I did a stealthy thing. I wrote him a bunch of fan letters, and he got those. Finally he figured out they came from the same person, and he wrote me a big letter calling me a psycho – but he included his home address. I finally got him to call me, and I talked to him and Carmack, and they agreed to do *Commander Keen*. Five months later the game was released [using the Apogee model, where the first episode is given away, and people pay if they want additional levels]. It did really well, and they decided to start up their own company called Ideas from the Deep, which later became id.

"Soft Disk sued, arguing [correctly] that *Keen* was created on their computers. They wanted the id guys to stay for two more years, and they were resigned to doing it, but I got a lawyer, and the result was that they did six more games for Soft Disk. Even then, *Wolfenstein* almost didn't happen because they still owed a game to Soft Disk. To give them time, Apogee actually developed that game, *Scuba Venture*. Then we had to promise them a lot of money, for the time: $75,000. A year later, of course, I was cutting them cheques for $100,000 a month."

The fallout: Not only did id unleash *Doom*, forever changing the direction of PC games, but Miller's Apogee model of shareware distribution helped the PC games industry grow very quickly. The Apogee model has had a lasting effect: few major PC games are published today without a robust demo being released prior to the ship date. With no approval structure to go through (as console games have to), PC demos act as a *de facto* approval process. If the demo is crap, no one buys the game. The result is fewer disappointments for gamers, who can 'play before they pay' – the original goal of shareware.

(The Stab in the Back) 1991

The moment: Nintendo cancels Sony's CD-ROM add-on for the Super NES.

The story: In the early-'90s, while Sega was in the process of developing its Mega CD add-on, Nintendo approached Sony with a view of making a similar CD-ROM device for the Super NES. Nintendo dedicated top engineers to the project, and Sony assigned a skilled engineer named Ken Kutaragi to head up the Sony side, which was finally announced in 1991 and dubbed 'PlayStation.'

Nintendo had even begun acquiring games for the new system, and US executive Don James visited Virgin Interactive Entertainment to have a look at *The Seventh Guest*, a title that he felt had the potential to drive sales for a Nintendo CD-ROM device. Nintendo even translated tiny portions of the game into cartridge form to prove that the game could run on a Super NES, and eventually purchased the console rights.

However, not long before the system was due to launch, Nintendo backed out of the project and left Sony holding the baby. The reasons for this have never been fully explained – lukewarm Mega CD probably contributed to the decision, as did Nintendo's lucrative cartridge-based licensing model (a model that it continues to adhere to). Whatever the story, millions spent on R&D by Sony went down the drain.



The Seventh Guest

The fallout: According to independent reports, Sony president Norio Ohga was furious. So furious, in fact, that he not only gave Kutaragi permission to continue developing a CD-based game system, but he also gave him permission to keep the original name. Nearly eight years later, Sony's PlayStation is the fastest-selling console in history, and Nintendo is no longer the dominant force in gaming it once was.

(The Myst Opportunity 1993)

The moment: *Myst* is released on the right format at the right time.

The story: After publishing three kids' titles on the Mac, brothers Rand and Robyn Miller wanted to do an ambitious project for an adult audience. Funded by Sunsoft (which, in one of the industry's greatest blunders, only contracted for the console rights), the pair took almost three years to deliver the game – a lengthy schedule, both then and now. The game was *Myst*. Released by Broderbund for the Mac in 1993 and PC in 1994, it housed hundreds of megabytes of rendered pictures on CD-ROM, a 'hot new' storage format. At the time, CD-ROM drives, especially running under DOS, were creaky and unpredictable. *Myst*'s simple game engine (HyperCard), still-picture format, and leisurely pace could run on almost anything, and hugely lucrative OEM deals soon put a copy in the box of almost every CD-ROM drive sold in the world.


Myst

The fallout: *Myst*'s crimes are manifold. The mystical mumbo jumbo that accompanies the storyline convinced some that any vague game premise would fly. The arbitrary puzzles continued the de-evolution of the adventure genre, and the game spawned countless imitations. The game's high production values, meanwhile, further closed the door on garage operations.

However, the game has done more good than harm. Without *Myst*, it's unlikely that today's healthy PC game scene would exist. It sold a lot of CD-ROMs and multimedia PCs, and its graphic splendour helped pave the way for the Super VGA graphics and 3D cards. The fact that it was the only game that reliably ran on DOS probably helped get the *Windows* gaming standard off the ground as well. *Myst* was a weak game, but it was also one that formed an important step in evolving the PC gaming world of today.

(Gamegate 1993)


US Senator Joseph Lieberman

The moment: US Senator Joseph Lieberman calls for committee hearings on videogame violence.

The story: There are actually three different versions of the events that led to the 1993 Senate hearings on videogame violence. The story told by several Nintendo employees is that the hearings happened as a result of Nintendo executives giving a speech decrying the Sega version of *Mortal Kombat* to the League of Women Voters, which was in fact delivered later that year.

The next account, told by some of the 'victims' of the hearings, is that Nintendo intentionally brought the Sega version of *Mortal Kombat* and the Mega CD game *Night Trap* to the attention of Senator Lieberman with the hope of stirring up trouble. According to Lieberman, this is not the case. He admits that Republican senator Slade Gordon did arrange a meeting for him with Nintendo representatives before the hearings, but he claims that he already had strong feelings about the Sega games before then. It is interesting to note, however, that Nintendo provided the video clips of *Night Trap* and *Mortal Kombat* fatalities used in the hearings.

Joseph Lieberman's version of the story is that he became aware of the violence through one of his aides. "Bill Andresen, my chief of staff, and I were talking," Lieberman claims, "and he said to me, 'You know, I'm having this argument with my son Chris (who was nine), about this videogame called *Mortal Kombat*, which I hear is incredibly violent. His friends have it, and he wants it.' I said, 'Let's get one of these things and look at it.' I was startled. It was very violent and, as you know, rewarded violence."

The fallout: No matter which account you accept, Senator Lieberman did hold a full-blown Senate hearing on videogame violence, which eventually resulted in the industry adopting a rating system.

Ironically, the industry's gore quotient soon went off the scale. With a rating system in place, developers felt free to create even more graphically violent games. Here in the UK, ELSPA (The European Leisure Software Publishers Association) and the Video Standards Council regulate videogame releases unless a game's content is thought to be in breach of the 1986 Video Recordings Act, which stipulates that games which demonstrate gross violence to human beings or animals are liable for classification. *Grand Theft Auto* and *Carmageddon* are two titles to have been awarded 18 ratings by law. Andreas Whittam-Smith, president of the British Board of Film Classification talks about these issues in more detail on p124.

TESTSCREEN

The definitive monthly assessment of the world's latest videogames

More top titles than will ever fit down a chimney

In **Edge**'s history, there has never been a better Christmas for videogamers. Sure, there have always been one or two 'blips' on what has otherwise been a plane of mediocrity – *Magic Carpet* in '94, *Virtua Fighter 2* in '95, 1996's *Tomb Raider*, and last year's *GTA* – but never has such a strong line-up of titles assembled in time for the festive season.

Software-starved owners of Nintendo's 64bit machine – no doubt the laughing stock of the less discerning PlayStation buyer – are about to put on a few kilos and deserve to look rather smug as a result. They are, after all, in a highly enviable position – not only are they able to play one of the finest videogames of all time (provided they manage to acquire a copy before the inevitable sell-out), but supporting *Zelda* is a desirable batch set to enrich many a cartridge collection. *Turok 2* leads the pack, tracked closely by DMA's *Body Harvest*, plus a smooth, abundantly playable *F-Zero X*. Of course, *1080°*, complete with its moments of brilliance, remains relatively new to PAL UK gamers and makes great supplementary fodder.

PC gamers also have a lot to smile about. *Grim Fandango* should have many of them initially perplexed at its lack of firstperson perspective, before succumbing to its immersive charms and LucasArts' immaculate digital storytelling ability. Those still preferring their meat served bloody rare will no doubt flock in the direction of the amazing *Half-Life* – assuming they're armed with P400s, naturally. And anyone looking for something other than *GP Legends* to give their new force-feedback wheel a workout will be eyeing *TOCA 2*, which should prove as playable as its PlayStation incarnation, albeit in far higher res.

This is where sheepish Sony devotees come in. Given the recent astounding sales performance of *TOCA*, its sequel should keep Codemasters in festive mood well into next year. *Spyro* will certainly sell extremely well, too (despite not setting the world on fire in terms of quality). The arrival of a third *Crash* instalment is unlikely to have caused numerous shock-induced cardiac seizures within the cholesterol-soaked community of the McDonald's generation, and it should sell by the truckload. This is a good thing, really, because it would be fair to say that the members of this particular demographic group represent a significant proportion of the five million fans *Crash* has acquired worldwide. Lara, meanwhile, will be doing her best to redress the balance somewhat.

Nevertheless, PlayStation followers needn't feel downhearted at their relative lack of triple-A software. There's always *Metal Gear Solid* on US import. And if that fails, they could always pick up an N64…





Christmas lights: PlayStation (and soon PC) sparkling four-wheeled action in *TOCA 2* (left), PC adventure brilliance from LucasArts' *Grim Fandango* (centre) and *Turok 2*'s blinding firstperson action on the N64

Index

Edge evaluates games on a scale of ten, where five naturally represents the middle value. A game receiving a 'seven out of ten', for example, is a competent title with noticeable flaws but which should still appeal to a considerable range of players – naturally more so to those who favour the title's particular genre. It does, after all, score two points above average and should therefore not be considered as such.

Edge's rating system is fair, progressive and balanced. An average game deserves an average mark – not, as many believe, seven out of ten.

Videogames on the Edge

Edge's Christmas list looks something like this…



Ocarina of Time (N64) Nintendo
The decade's most eagerly awaited, and one of the most exquisite titles in the history of gaming. *Zelda 64* is pretty much *everything* it promised to be.



Half-Life (PC) Cendant
One of the year's most astonishing titles – on any format – Valve's game towers above the competition from a *very* commanding height.



Metal Gear Solid (PS) Konami
The US version of Konami's stealthfest may lead players by the hand a little too much in places, but it remains one of the best games of the '90s.



Shogo (PC) Microids
Over a tad quickly if its difficulty levels aren't tweaked, *Shogo* extends its lifespan with a frantic and highly enjoyable multiplayer experience.

LEGEND OF ZELDA: OCARINA OF TIME









The young Link awakens and steps outside his treehouse to survey Kokiri forest – the spirited and homely surroundings in the first section of the game



Like its predecessor, *Ocarina of Time* offers up a wealth of weapons, and their integration within the game has been handled in inspired fashion







Beautiful cut-scenes regularly interrupt the action to advance the plot. There's a seamless level of continuity between these and the game itself, too

Anyone who's scrutinised the hundreds of screenshots printed in **Edge** over the past three years could be forgiven for feeling overly familiar with Nintendo's epic even before it hits the shops. But this has been mere titillation compared to finally experiencing the finished product. Here's a title perhaps more qualified than any other to demonstrate Nintendo's irrepressible knack for honing things to perfection.

Anticipation has swelled around *Ocarina of Time* (see p133) ever since its development began three years ago, although the popularity of its immaculately conceived forebear, *Zelda: A link to the Past*, sowed the first seeds of expectation a further three years before that. The series' graduation from 2D to 3D is commendable because it retains the essence of what makes the *Zelda* experience unique – an intoxicating blend of exploration, action, puzzle-solving and storytelling now fused with state-of-the-art visuals. It's *Zelda* all right, but it now benefits from a new level of creative and technical ambition. Sensibly, Nintendo has skillfully avoided the possibility of ending up with a fantasy-themed version of *Mario* (a 64bit title whose gameplay took a considerable detour from the precise 2D platforming of its 16bit days). The result is pure, unadulterated *Zelda*, 1998 style.

From the title scene depicting Link astride a galloping horse, to the firstperson-viewed flightpath of sidekick fairy Navi as she clumsily navigates her way to Link's home, events unfold in this saga with a neatly choreographed, cinematic quality. Beautiful realtime cut-scenes punctuate the game with an integrity and seamlessness that throws a considerable shadow over the more incongruous mix of styles in *Final Fantasy VII* – Square's vast, render-intensive approach wholly eclipsed by the painstaking efforts of Nintendo's artists. In this case, less has most definitely meant more for Nintendo.

The upbeat Kokiri forest is the setting for Link's first exploits and works in a similar fashion to *Mario 64*'s castle grounds – as a playpen in which to become acclimatised to the controls and interact with the impish





Format: **Nintendo 64**
Publisher: **Nintendo**
Developer: **In-house**
Price: **£50**
Release: **Out now (US) December 11 (UK)**



Platform sections are rare, and jumping is handled automatically to give the action a distinctly different feel to previous 2D-to-3D experiment, *Mario 64*



Initially just a cute little pony, Epona the horse is useful transport later on in the game. You'll have to learn how to tame her first, though

inhabitants of the village. Once inside the giant Deku tree (the first dungeon) you'll quickly discover nuances in the control system such as Link's automatic jumps – a conscious attempt to differentiate the gameplay from *Mario*'s – as well as the intricacies of the combat system, which are initially daunting, but prove well-designed and effective.

Aside from regular sword combat (which has its own repertoire of moves and attacks), firstperson views come into operation when brandishing certain weapons such as the slingshot or bow, or when using items such as the hookshot. However, holding the Z-trigger when close enough to an enemy activates a thirdperson, locked-on perspective – with strafing a simple matter of moving left or right. This makes simple work of targetting enemies, with a cross-hair automatically tracking the nearest foe. (Incidentally, wearing headphones even provides effective stereo 'vision' which is especially useful when keeping track of the game's formidable line-up of bosses.)

Just as combat is an evolution of that of the 2D series, now making best use of the N64's pad, Nintendo's decision to set the story (a prequel to the series) in two time zones – one when controlling the younger Link and the other when he's matured – can be traced back to the 16bit *Zelda*'s ingenious light and dark worlds. Time travel between the two zones provides a distinct change of tone, with the spirited joviality of the youthful Link cleverly juxtaposed with the darker, weightier challenges he





Climbing the look-out tower in Kakariko village is a good example of how advanced the 3D engine really is

Be under no illusions that this is anything less than a serious **gaming commitment…** innovative new touches elevate the game **well beyond previous *Zelda* outings**



The style of combat most faithful to classic *Zelda* gameplay locks the player on to an enemy in the thirdperson view, making targetting relatively easy





As in Konami's Nintendo 64 interpretation of *Mystial Ninja*, *Ocarina of Time* offers an overhead map, ensuring that progress is rarely held up



The equipment screen, like the interface in general, is typically Nintendo-like in its construction: clean, clear and easy to use

faces later on. Challenge after challenge, the engrossing plot moves along steadily, fuelled by a cast of memorable characters that dampen the spirits one moment and lift them the next. And, with around 60 hours of gameplay – and far more if you were to leisurely explore every detail of the fascinating gameworld – it is a title of some substance. Be under no illusions that this is anything less than a serious gaming commitment.

Aside from a range of entertaining sub-games (a spot of fishing, perhaps?), hidden items (a Rumble Pak provides clues to their location) and ingenious puzzles that are sometimes so simple you'll often struggle to see the wood for the trees, the inclusion of sparkling, innovative new touches elevates the game well beyond previous *Zelda* outings. One masterstroke is the Ocarina itself, whose importance is not only reflected in the game's title but in its use at key points in the game. Playing simple ditties by using the yellow C buttons may seem like a token gesture, but the composition of melodies is a worthy adjunct to the core gameplay, and engenders an ethereal charm of its own.

Incidentally, audio plays a prominent role throughout the game, and the quality of the music and sound effects (particularly those of the wildlife activity in the Hyrule kingdom) will impress even the most jaded aural connoisseurs.









True to the series, numerous sub-games are scattered around the *Zelda* world in which players can waste hours in the pursuit of extra gems with which to buy items. Besides fairground-style shooting galleries (far right), Link plays chicken (far left), and even takes time out for a spot of fishing (centre, left)











As play progresses, the world of Hyrule is plunged into zombie-infested darkness. Time travel will help you complete the quest. The screen 'letterboxes' during combat (left)

Just as the gameplay foundations are flawlessly constructed, the visible world Nintendo has built upon them is majestic in every respect. Replete with rising and setting suns, flowing rivers, waterfalls, lakes, deserts, towns and virtually any kind of geographical feature you could imagine, Hyrule is a terrifically convincing gameworld. Vast, open expanses with no pop-up, dramatic mountain vistas, huge, beautifully shaded enclosures, incredible particle effects such as sandstorms, and the melting hues of sunrise and sunset all combine to make this a devastatingly beautiful game.

Only the curious blend of static backdrops and pseudo-scrolling indoor viewpoints – such as those employed in Hyrule town – look perfunctory by comparison. But even these represent an interesting detour from the standard thirdperson view.

Everything in *Ocarina of Time* is realised with an elegance rarely seen in videogames. From the spirited, Disney-esque feel of the proceedings through its pacey storyline, incredible scale and vivid cinematics, nothing has been overlooked in the pursuit of perfection. In fact, the only blots on an otherwise flawless landscape are the occasionally ponderous bouts of text which resonate with saccharine-rich Americanisms that sometimes impose an undesirable element of linearity on the open structure. Some players will feel such guidance simply isn't necessary (plus, of course, there will be the usual batch of gamers intent on wading through the Japanese version on import), but there are times when you'll be clamouring for all the help you can get.

That Miyamoto has spent more time on this project than other under-nourished 64bit updates such as *Mario Kart* and *Yoshi's Story* is more than palpable – *Ocarina of Time* shapes up as arguably the most accomplished game to have ever come out of the studios of NCL, and is reason enough to buy a Nintendo 64 in itself. Most importantly, though, the game singlehandedly restores the faith in both the creative might of Nintendo and in the power of the videogame as an entertainment medium. A work of genius.

Edge rating:

Ten out of ten





The Ocarina is one of the most important items in the game. Playing tunes on the N64 pad is an ingenious touch that adds a new dimension to gameplay

HALF-LIFE





A command facility is available to direct security stooges into your line of fire







A tricky stand-off situation affords the time to admire Valve's skeletal mesh system close-up. And particle dispersion algorithms shortly after



A frame by frame demonstration of how not to park your helicopter. The foreground presence of a gauss gun is not entirely coincidental

Half-Life is the PC game of the year, without question. It's a game that PC owners can be proud of – as the epitome of all that is great about their chosen system – in the same way that N64 owners rightly point to *GoldenEye* as evidence of their own good taste. In fact, if the whole enterprise wasn't going to set you back a grand, this game alone would be reason enough to own one. Few games induce such messianic fervour, but *Half-Life* is worthy because it transcends genre-defined boundaries of appeal, dissolving formula fatigue by provoking and preying upon the most primal human emotions to create an experience that is at once exciting, scary, startling and funny.

In blandly comparative terms, *Half-Life* is fundamentally a firstperson shooter, an offshoot of the seminal *Quake* and id's adopt-an-engine scheme. But whereas, in recent times, id has been content to push the technology benchmark, Valve has concentrated on bench-pressing the gameplay. In doing so, it has chased away the reek of stale genre with innovation and a sense of pure drama.

Half-Life does not merely stick a shotgun in your hands and line up a procession of polygon-modelled automations for the slugging. Instead, the title creates an obsessively detailed, immersive world of seamless integrity, and uses every device at a game designer's disposal to lure the player through it to the very end.

The action isn't just dished up, it leaps out. Look down a shaft and a head-hugger will launch at your face. Walk down a corridor and the floor will cave in, or the ceiling will collapse showering you in monsters, or they'll burst through a window, tear through a door, or abseil through the roof – anything, in fact, other than appear from an expected quarter like so much level padding. Anything that shocks, alarms or surprises is to be applauded, and with *Half-Life* Valve has taken the time to position every creature with Hitchcock-like deviousness.

Similarly the action is directed with masterly skill. Dying men breathe their last before you; victims undergo alien transmutations; voices babble for mercy in places you have to enter next; hapless boffins are dragged into vents where unseen horrors vomit their remains back at you; fixtures explode; and you're invariably invited into cramped, poorly lit, ghoul–concealing apertures that







Ingame cut-scenes provide the player with clues to progression and timely health warnings that can help you avoid hazards

Format: **PC**

Publisher: **Sierra**

Developer: **Valve**

Price: **£40**

Release: **November 30**





The government death squads represent the pinnacle of PC AI. Not only do they kill you, but they make you admire the way they kill you

prompt a 'save game' response. Not since *Doom* has a game provoked such an emotional reaction. And, because you're constantly twisting on the end of drip-fed suspense, the action is all the more piquant on arrival.

Perhaps most excitingly of all, Valve has designed its monsters to exploit the ingrained instincts of seasoned gamers, challenging their mental, as well as their manual, dexterity to adapt to, and thrive in, a gaming environment that defies convention. This ethic is compounded in the tri-tentacled terror that appears about halfway through the game. It's a glorious graphical achievement that you're impulsively compelled to fill with lead. It hunts by sound. A simple device that, even many reloads later, is impossible not to admire.

So few designers ever bother to deviate from formula, that technological advances have long since outstripped gameplay. The action in most 3D games still occurs on an essentially 2D plane. But here, Valve introduces the roof-barnacle, a hair trigger tongue dangling lazily down from a set of ceiling-fixed teeth, which makes the player appreciate the full implications of 3D space, and thus hone the skill of looking 'up'.

Throughout the game, the creatures demonstrate behavioural quirks that are a pleasure to behold.

Initially, the creatures are deliberately shambling and bestial, prone to pack-hunting but not intelligent, because it suits the plot. Later, though, MENSA monsters and human Black Ops troops appear – characters that are generously endowed with the best AI yet seen in a PC game. Expertly parading their gamut of realistic animations, the death squads are capable of coordinated attack and intricate path-finding. Some will lay down suppressive fire, others move up by the numbers, while more will have scuttled out of sight, until they eventually burst out from a blind spot and attack from the rear. Fire back, and they'll retreat, move and try to cut you off; stay still and they'll flush you out with grenades. It's an incredible achievement that goes someway to fulfilling the empty 'realistic AI' promises that appear mandatory for all game ads today.

Half-Life is a technical and artistic masterpiece. It delivers on so many levels that criticism seems churlish. Hardcore players could probably carve it up in a few days, but this is a game to be cherished. Wreathed in atmosphere, drenched with imagination, mined with surprise, *Half-Life* will devastate all who touch it.

Edge rating:

Nine out of ten

The tri-tentacled terror appears about halfway through the game. It's a **glorious graphical** achievement that you're impulsively **compelled to fill with lead**







In a radical break with videogame convention, bosses in *Half-Life* do not necessarily appear at the end of a level

TOCA 2: TOURING CARS





Three of the seven new categories on three of the ten new tracks. From the top: AC Superblowers, Formula Fords and Lister Storms



It may share the same eight basic tracks as its predecessor, but this is more than just aesthetic improvement. Codemasters has included a splendid host of extras

Load up *TOCA 2* and you'd be forgiven for wondering whether Codemasters' original touring car-based racer isn't spinning in the PlayStation's CD drive instead. Bypass the very impressive (however superfluous) FMV intro sequence and you're faced with a 1998 starting grid worryingly reminiscent of last year's effort. Other than several livery alterations, the cars are the same. More important still, the tracks are the same. Some of the drivers may have swapped teams, but superficially, the game looks uncomfortably familiar.

Look under the bonnet, however, and things take a different course altogether. All of the cars are now front wheel drive. Not a problem, really, unless of course you're one of the few who favoured the four-wheel-drive action offered by last season's Audi A4, because corners will now definitely require a rather different approach. There is also the considerable aspect of an obligatory pit stop to contend with during longer races. While this represents a new development for the Touring Car world, F1 fans will be aware of the crucial importance of pit strategy, particularly if the game's dynamic weather enters the fray.

Visuals now boast a higher resolution (512x240), making details such as the player's name on the vehicle's windows (previously only seen in the PC *TOCA* edition), and tyre marks on kerbs possible. The cars are also better modelled and suffer more damage, with smashed windscreens, flying bonnets, bumpers and side panels, smoking engines and worn gears the inevitable upshot of most races. On the other hand, pop-up is still evident, but you're unlikely to notice this mid-race without running the risk of redesigning several body panels, courtesy of a nearby tyre barrier.

This is because *TOCA 2* demands constant and absolute concentration. A glance at one of the many new trackside features is likely to result in a missed braking or turning-in point, which subsequently results in a spin, a trip across the grass and several lost positions by the time four wheels are back on the black stuff. And, although tempting, taking it easy is not advisable. Not only are you unlikely to win any races, but CPU opponents eager to get past will think little of bumping you into a gravel trap in order to make up a position. Your opponents are relentless (certainly in the higher difficulty settings), leaving



The racing is as close as ever, but the new (obligatory) pit stop (top right) throws a considerable amount of strategy into the frantic proceedings







Format: **PlayStation/PC** (PlayStation version tested)

Publisher: **Codemasters**

Developer: **In-house**

Price: **£40**

Release: **Out now**







TOCA 2 is not an arcade racer, so expect a lot of incidents during your first few races. Dual Shock support ensures that the physical aspect is convincing

you no option other than pushing the tyres to the limit of their adhesive properties in corners and getting the most out of the 300bhp engine on the straights.

But, of course, there's an awful lot more to *TOCA 2* than simply racing tuned saloons around Britain's premier motorsport venues. In a moment of madness, Codemasters decided to include all of the support championships that accompany the *Touring Car* series. Initially, all but two are inaccessible, yet a reasonably decent season (four races) in the Fiestas and Formula Ford single seaters should reward you with enough points to unlock the Lister Storm championship. And it's the same for the rest of the categories – AC Superblower, the three-wheeled Grinnal Scorpion, TVR Speed 12 and Jaguar XJ220 – with each requiring an increasing cumulative total before access is granted. By now, the fact that each of the different categories boasts unique handling characteristics which thoroughly test your driving ability shouldn't come as a surprise.

There are extra tracks, too, with four fictional offerings set in Scotland, Germany, the US and the French Alps, as well as longer configurations of Donington and Oulton Park. Furthermore, a test track allows any modification to a vehicle's setup to be instantly evaluated using one of its eight internal sub-tracks, which include a skid pan, a dusty road and a runway strip.

Yet the game's defining option is its twoplayer link-up mode. Featuring all 16 TOCA cars simultaneously (ten for any of the support series), two individuals can engage in hugely enjoyable races without losing any of the detail and framerate evident in the two and fourplayer splitscreen alternatives. Starting a linked-up championship is bound to elicit levels of rivalry (and racing conduct) rarely seen in videogaming, with some frantic and hilarious results.

It may not boast handling quite as refined as *Gran Turismo*'s, for example, but *TOCA 2* manages to retain the highly technical nature of its successful predecessor while significantly improving on every other department. The result marks another magnificent specimen to emerge from Codemasters' recent – and seemingly infallible – venture into the videogame racing circuit.

Edge rating:

Nine out of ten

TOCA 2 demands **constant and absolute concentration.** A glance at one of the **many new trackside features** is likely to result in **a trip across the grass** and several lost positions





Opponents are not afraid of a little contact if it means gaining a position – hand signals are not required (left)

POPULOUS: THE BEGINNING











As a new spell is acquired (main), its symbol spins around the game world before appearing in the menu bar. A blast spell throws warriors into the air



Each level is played out in a different environment. In this colourful and imaginative ice world, fire-wielding warriors tear across the plains





Just when the small islands start to feel limited, preying at a totem pole brings forth this gift...

It can't be easy following in the footsteps of a gaming legend. Not only does Bullfrog need to prove that there is life after Molyneux, there's also the tricky task of doing justice to the *Populous* name without simply going back over old ground. Many other development teams would crumble under such pressure.

The route taken, then, is surprisingly simple, but very shrewd. Rather than pushing the series further into nebulous, hand-of-god territory, Bullfrog has brought things back down to earth. Tapping into more military-based realtime strategy gaming, *Populous: The Beginning* actually places the activities of its people directly under the player's control. It's a move that instantly gives greater mainstream appeal, at the expense of real innovation perhaps, but one that does actually allow for a greater degree of strategy within the game's reassuringly tight framework – an attribute that, in retrospect, it's clear *Dungeon Keeper* lacked.

The move has also prompted the switch from sequel to prequel, with the action taking place in a time before the first two games, when magic exists but the gods haven't yet started tampering with the lives of mortals. Instead it's the shaman in each tribe who wields the power, with players taking charge of a female leader as she instructs her tribespeople to build, breed, worship or fight. Mana, as ever, plays a part, with followers increasing levels, which can then be used to cast any spells, and various totem poles, temples and other features provide access to new spell types and one-off castings.

Each of the 20-plus levels takes place in its own miniature world, where that artificially tiny diameter not only makes the playing area manageable but also gives rise to one of the game's more inspired ideas – the curved horizon. This gives *Populous: The Beginning* a wholly individual look and proves highly practical in play, with detail rolling smoothly over the horizon as the player scrolls and rotates the viewpoint. It proves just as intuitive as *Command & Conquer*'s system, despite the extra dimension.

Previous Bullfrog titles have always placed gameplay ahead of graphical finesse, but that's no longer the case. The visuals in this title are first-rate, with a wealth of detail complementing those stylistic curves. The tribe constructs buildings bit by bit, chopping at ever-shrinking trees for wood, kneeling to pray, even leaving

Format: **PC**

Publisher: **Electronic Arts**

Developer: **Bullfrog**

Price: **£40**

Release: **Out now**





Spells such as the volcano deform the landscape in spectacular style. Lightning (right) is also impressive







As players gain access to the more spectacular spells (top right), multiplayer face-offs become wonderfully over the top. The style of battles change somewhat when balloons become available, however (above right)

trails in the dirt where they walk. Every settlement seems full of life, as the people go about their business. It is a fascinating game to observe.

Naturally, the spell-casting adds further to the visual appeal, with tornados ripping buildings to bits, blast spells throwing enemies into the air (whereby they often fall into the sea and drown) and the more advanced elemental effects like volcano-summoning really make mincemeat of the enemy and the landscape. And all the while suitably tribal music plays along, with key events accompanied by extra tunes, noises and effects. In presentation terms, in fact, *Populous: The Beginning* is almost impossible to fault.

The extensive playtesting Bullfrog has undertaken in the last few months has also paid dividends, with each level adding enough new spells



Switching the view to the ingame camera, here seen mid-descent, is a smooth transition

The spell-casting adds further to the visual appeal, and the more **advanced elemental effects** like volcano-summoning **really make mincemeat** of the enemy and the landscape

and challenges to make progress worthwhile, but turning the screws that little bit more. Once the idea of taking on an enemy tribe doesn't seem so formidable any more, along comes a world with two tribes to deal with. The solution – to turn them on each other – demonstrates how structured the levels are, the freeform style of previous Bullfrog games having been ditched in favour of a more clear-cut format.

Yet while such an approach is new to the *Populous* series, it does unfortunately have the effect of making the final experience less show-stopping than might be expected. This is very much a blend of previous god games and more mainstream realtime strategy gaming. But while the rigid framework and direct control system prevents it from being a true innovator, that hybridisation of the two strategy genres is a real recipe for success. This is an effortlessly playable game, and sometimes that's more than enough.

Edge rating:

Eight out of ten

WARGASM





Format: **PC**

Publisher: **Infogrames**

Developer: **DID**

Price: **£40**

Release: **Out now**

Initially, it's easy to jump from unit to unit as they get terminated. With time, however, some strategy is necessary



As the game progresses, a wider variety of artillery becomes available. Provided you've requested it, an air strike (above) is always welcome






***Wargasm* is hugely atmospheric. The visuals can be breathtaking, with some of the best explosion and rain effects ever seen in a game (above)**

In the future, wars will be fought in cyberspace – over the World Wide War Web; nations of the globe will engage on a virtual battlefield, settling their differences without human loss. This is the concept that, according to DID, isn't very far removed from current reality.

However, at this stage, *Wargasm* is still a game, and quite a significant one for its maker. Usually knee-deep in competent, specialised simulations, DID has ventured onto terra firma and created something likely to appeal to a far broader gaming crowd.

The game adopts a lighter approach, best illustrated by the absence of a weighty instruction manual for players to digest. There's a training mode that takes you through the control functions that are required to operate a tank, helicopter or soldier, and impatient types can jump straight into Instant mode – a linear, yet very enjoyable, arcade-style action experience.

The main game, however, is the War Web. This world is split into seven regions (ranging from six to eight missions each), which vary in terrain, weather and enemy resistance. Before engaging the opponent, you must make up your unit and, once on the battlefield, quick strategic decisions must be made regarding which course of action to follow. You could, of course, witness the developments by staring at the map and instructing your forces with a few clicks of the mouse, but that would be missing the game's essence. There's nothing in here that matches jumping in and taking control of one of your units.

The graphics are remarkable, contributing a very solid feel to the hectic course of events, and conveying a real sense of immersion, while aural support in the form of magnificent effects further enhance the superb atmosphere. And while the AI is fairly advanced, it's naturally not as good as facing a human opponent – which is where the wonderful multiplayer option comes in.

Wargasm is a conspicuous mixture of strategy and arcade. It's not *TA*, but it doesn't pretend to be. Some may balk at the occasionally repetitive nature of some of the missions, but the environments are large enough to allow numerous strategic approaches, with unique consequences. Most will find it a very entertaining, player-friendly experience which can still challenge even the most critical strategy fan.

Edge rating:

Eight out of ten

SIN



The evil Alexis uses a mutation drug called U4. Its effects aren't hard to spot









Enemies can hide behind corners, duck, sidestep, run away and regroup. Accurate headshots are essential when there are this many in view

Format: **PC**

Publisher: **Activision**

Developer: **Ritual Entertainment**

Price: **£40**

Release: **Out now**





You can utilise machinery, such as this bulldozer, to rearrange parts of the landscape

When *Sin* made its first public appearance at E3 some 18 months ago, it bore the look of a professional, but essentially unoriginal *Quake*-based shooter. Yet that playable demonstration had been created in little over three months, and has now been crafted into an action adventure of a high calibre.

A modified version of the *Quake II* engine powers the game (which means multiplayer action is as smooth and balanced as could be hoped for), but the differences don't simply lie in the addition of localised lighting, 16bit textures and improved character animation. Rather, it's the way the game plays so differently that sets it apart. There are echoes of id creations, just as the urban locations and the use of John Blade (a distinctly macho, wisecracking hero), recall the *Duke Nukem* titles. But from the off Ritual has worked hard to inject a substantially different kind of shoot 'em up action. With a penchant for pitting the player against half-a-dozen gun-toting goons at once, it owes as much to *Virtua Cop* as anything.

As with *Tomb Raider*, there's a pneumatically built female character in the equation, but this time the top-heavy totty, Alexis Sinclaire, is the archenemy of the tale. But as most confrontations with her minions turn into bloodbaths, and Blade's audio comments often resort to expletives, *Sin* has little time for political correctness – not when there are countless grimy corners of the futuristic city to map out in beautiful detail. Only *Half-Life* beats *Sin* for environment detail and even that title doesn't pack in as much interactive scenery. Some levels seem constructed from little more than collapsing floors, while others frequently leave Blade without an exit. Until, that is, a bit of lateral thinking provides a way to create one.

It is this combination of interactive environments and brilliantly reactive opponents that really impresses. Ritual also claims that the story is pushed forward using action-based outcomes, though this seems to affect situations in the short-term rather than lead to whole new plot branches. But then with a tight storyline guiding you through the levels, it would be unwise to stray too far.

As breathlessly enjoyable as it is, *Sin* doesn't exude quite the same power as Valve's *Half-Life*. But where *Half-Life*'s dark horror theme provides more visual opportunities and heart-pounding frights, *Sin* goes all out for gung-ho fire fighting. Nothing else comes close.

Edge rating:

Eight out of ten





Much emphasis is placed on accurate shooting. Note the exuberant use of blood

SHOGO: MOBILE ARMOR COMMAND

Format: **PC**

Publisher: **Microids**

Developer: **Monolith**

Price: **£40**

Release: **Out now**







Aware of the lack of multiplayer-only levels, Monolith is expected to release a patch on the Internet







The LithTech engine handles *Shogo*'s polygonal world admirably, also managing to throw in some pleasant lighting effects







Considering the setting, the environments are surprisingly varied and partly responsible for fuelling the player's desire to establish what is around the corner

Given the popularity and influence of anime outside its native Japan, it's surprising that it has taken five long years after the appearance of *Doom* for a developer to create a firstperson game set within a manga-esque environment. Beat 'em ups, RPGs, and even racing games based on popular anime series have previously surfaced with frightening frequency (naturally, almost solely in Japan), but no one has hitherto bothered to marry manga character design with a *Quake* perspective.

Monolith, however, realised the potential of such a union. *Shogo* centres around Sanjuro, a young United Corporate Authority pilot who has lost his girlfriend, brother and best friend to a senseless war, and whose mission is to locate and eliminate rebel leader Gabriel.

While the plot is hardly the most imaginative (even by manga standards), at least the voice actors deliver their clichéd lines convincingly, and despite the westernised look of the human characters, *Shogo* feels pleasantly anime-like. Part of this is undoubtedly due to the ability to jump into one of four mobile combat armour units for some of the missions. Unlike their cumbersome counterparts in Activision's *Heavy Gear*, *Shogo*'s MCAs prove as agile and swift as those depicted by Japanese anime artists. The feeling of controlling a ten-metre-tall robot may sometimes be lost during the game's open air missions, but generally, the massive increase in firepower has a tendency to bring things back into perspective.

In fact, other than its relative shortness (you should be able to see the end credits in under nine hours of admittedly very enjoyable play), one of *Shogo*'s problems lies in its unbalanced weapon range. Whether on foot or aboard the MCA, some of the guns prove substantially overpowered which makes progression significantly easier than it should be. Still, increasing the difficulty level considerably higher than the default setting should make things a little more balanced.

More worrying, though, are the varying degrees of AI. It's commendable to see an enemy retreat from a bullet-ridden battlefield to mount an ambush later on in the level, having found reinforcements. However, all too often Sanjuro can shoot down a member of a group of guards securing a passageway only to find his comrades remaining firmly inactive, blissfully unaware that a guy who was standing less than a metre away only half a second before is now a blood-soaked mess soiling the floor.

Despite these shortcomings, though, *Shogo* remains a highly enjoyable experience. A worthy stocking filler.

Edge rating:

Seven out of ten

TOMB RAIDER III









Although analogue control of Lara can prove disappointingly imprecise, you can use the second stick to 'look' while moving with the D-pad – an excellent touch



(Above) Vehicles make a welcome return in *TRIII* while the end-of-section bosses are hard to beat (top, centre)

Format: **PlayStation/PC** (PlayStation version tested)

Publisher: **Eidos**

Developer: **Core Design**

Price: **£40**

Release: **Out now**





***Tomb Raider III*'s non-FMV cut-scenes (top) are interesting, yet appear decidedly low-fi when compared to the high resolution of ingame effects (above)**

Tomb Raider III refines an ageing design brief, offering a semblance of sophistication that belies the simplicity of the game mechanics beneath. As Eidos' **Ian Livingstone** confirmed last issue, this latest offering is "more of an evolution than a revolution".

Despite the three new additions to her physical repertoire – the ability to crawl, sprint and 'monkey swing' – Lara appears increasingly clumsy in her gaming context, in contrast to her flexibility as a marketing icon. Her awkward 'turning' animation has *still* not been addressed, and control of Core's lascivious Lara can become stilted and uncomfortable in the more complex environments of this latest instalment.



Despite using a tweaked version of a three-year-old graphics engine, some monsters manage to amaze

Yet *Tomb Raider III* is a valid addition to the growing franchise. With hindsight, it is more inventive than the perhaps overrated *TRII*, and offers markedly more attractive visuals. Although many of its subtleties aren't immediately apparent, Core has laboured long and hard within its limited development time frame to add fresh aspects to its gameplay, too. For example, it has a touch of *Metal Gear*-style stealth, alternative routes through levels, and its assailant AI has, at long last, received the overhaul it so desperately needed. Indeed, there are even characters that actively seek to assist Lara (unless she opens fire without due consideration) – a thoughtful and welcome addition.

It's ironic, however, that Core appears so uncertain as to whom *Tomb Raider III* is pitched at. The re-introduction of Save diamonds – although these can be stored and used at your leisure – is a certain to appease the hardcore gamer, yet frustrate the casual, less skilled 'mainstream' player. Similarly, the game's levels are sprawling affairs. Challenging for even the most experienced *TR* devotee, it's hard to imagine how the less committed gamer will forgive patience-sapping repetition of difficult sections.

The omission of ingame narrative of some description is also a mystery; its inclusion would not only assist *TRIII*'s cinematic pretensions, but could also help alleviate the many instances where cause and effect are turned on their head by the less linear nature of certain levels.

As enjoyable and engaging as *Tomb Raider III* is, though, roll on the revolution.

Edge rating:

Eight out of ten

CRASH BANDICOOT: WARPED

Format: **PlayStation**

Publisher: **SCEE**

Developer: **Naughty Dog**

Price: **£40**

Release: **December 11**







Although unlikely to capture many adult players, this latest instalment is undeniably visually accomplished





Crash's new abilities might be entertaining, but they fail to save the game







In addition to being able to ride on the back of a baby T-Rex, Crash takes any opportunity to show off his yo-yo skills. It's just one of many amusing touches

Just like Eidos with Lara, Sony realises that *Crash Bandicoot*'s target audience is likely to react negatively to too much change. Yet, to its credit, and unlike its shameless, lazy predecessor, this third offering does at least attempt to throw a few new developments into the ageing proceedings.

Yes, *Crash 2*'s warp room configuration remains intact, with five worlds each split into a quintet of levels. But in addition to the usual running in and out of the screen (either on foot or on the back of a friendly animal), Crash can also scuba dive, pilot a biplane and speed along a generous strip of winding tarmac on a motorbike. Although these are hardly the most revolutionary of gaming extras, both flying and biking provide a substantial diversion from endless platforming action and prove particularly enjoyable.

And as a further attempt at injecting variety into Crash's undertakings, the five worlds differ in internal level structure from one to the next – while one may emphasise the generic platform stages, another may prefer to feature a majority of Crash's alternative activities.

Other interesting features are the special power moves (super double jump and death tornado spin attack, for example), rewarding you each time an end-of-level boss is defeated. These are crucial for the completion of subsequent levels, even if the bazooka makes things a little easy.

Indeed, aimed at the younger market, average players are unlikely to take more than a day's play to complete it, although a lot more time is required if all the crystals, gems and relics are collected – and only then is the game truly finished.

However, it's unlikely that most **Edge** readers will be prepared to invest the time and effort required to fully complete *Warped*. It's competently produced, with an intuitive control system, impressive visuals, and high production values. Yet, ironically, Crash's new activities emerge as the game's most entertaining aspect and, as such, serve as a stern reminder of the platform-based levels' inferiority. Despite a few novel touches, they fail to convey any real sense of diversity.

Given its timely release, the third instalment in the *Crash* series is bound to be a massive commercial success, hugely popular with the younger PlayStation players who will get the most from it.

The rest of the gaming world, however, may find the overall nature of its proceedings too repetitive and hence unlikely to incite any feelings of passion.

Edge rating:

Six out of ten





The old disguised as new – *Crash* fans are unlikely to complain, however

COOLBOARDERS 3

You have to wonder whether anyone bothered to submit this through QA before it was admitted into the PlayStation CD duplicating plant, because it is practically inconceivable that Sony would have allowed what is essentially the PlayStation's answer to the N64's *1080°* to hit the streets in what seems to be a half-finished state.

In terms of dynamics, this is seasons behind Nintendo's effort, lacking the fluidity or finesse of the latter, which results in far less intuitive controls. Unfortunately the game's AI is also suspect and the collision detection is questionable, as it occasionally requires unreasonably high tolerance levels from players.

On a positive note, however, six stages – each with six pistes (slalom, downhill, half-pipe, big air, slope style and boarder-x; a giant, four-man eliminator), 13 initial boarders and three styles of board – offer a wide array of choices. This is complemented by graphics and a sense of speed which surpass the game's predecessors convincingly, despite the environment's mostly angular look and the evidence of occasional glitching.

Ultimately, *CoolBoarders 3* can offer a mildly entertaining experience but, despite an improved stunt mechanism which significantly facilitates the realisation of more complex aerial acrobatics, fails to better its predecessor in playability terms. As such, don't expect its generally unrefined nature to captivate anyone familiar with the superlativeness of *1080°*.

Edge rating:

Five out of ten





The sense of speed has been improved, and the splitscreen mode proves fun

Format: **PlayStation**	
Publisher: **SCEE**	
Developer: **989 Studios**	
Price: **£35**	
Release: **Out now**	





It may offer two more opponents to race against and a multitude of hidden characters, yet Sony's third snowboarding title is far behind NCL's *1080°*

B-MOVIE

As its title suggests, *B-Movie* is themed around the infamous 1950's Hollywood B-movies such as 'It Came From Outer Space' that delivered comically low-brow sci-fi plots, dealing mainly with abduction by aliens. Developed by London-based team King of the Jungle, the game is a fast-moving 3D shoot 'em up strung together with multiple mission objectives which tax hand-eye coordination if not cerebral dexterity.

The most striking thing about *B-Movie* is the smooth operation of its 3D engine, which updates at 50fps (60fps with NTSC). Unlike the majority of *Star Fox*, *B-Movie* is a full 360-degree shooter, which makes the high framerate essential to keep pace with fast turns. Once the alien hordes arrive (which they do in startling numbers), the game's action content is reminiscent of past 2D shoot 'em up favourites. A radio delivers the various sub-missions for each level, such as beaming up civilians and taking them to safety, or repositioning small gun turrets near bases. Scientists and alien crystals can also be collected and used back at base to create new ships, weapons and other add-ons.

Backed-up by a strong musical score, *B-Movie* has many of the right ingredients for success, with an interesting concept, novel gameplay and good looks. The pudding is spoiled, however, by a difficulty level and rate of combat that will turn off even the most hardened gamer. For those willing to take on a challenge, *B-Movie* may be acceptable, but for everyone else it will prove simply frustrating.

Edge rating:

Six out of ten



One of *B-Movie*'s neat extras is this 'vector graphics' training level. (The effect is actually achieved using a cleverly designed set of alternative textures)







The game's visuals are bright and colourful, in the style of many classic arcade titles

Format: **PlayStation**	
Publisher: **GT Interactive**	
Developer: **King of the Jungle**	
Price: **£40**	
Release: **Out now**	

Dolby Digital: Cinema sound coming soon to a PC near you

Recently completed technological developments look set to transform PC audio content, with Dolby Digital, the 5.1-channel audio system used in cinemas, being brought to the home market, and a number a top-drawer codeshops already up and running with the initiative.

Crucially, "you don't need a costly home cinema system to enjoy the benefits of true multichannel audio on your home PC," according to **Rik Ede**, manager of games production at Dolby Laboratories, which has been working closely with developers.

Dolby has created a set of 'filters' – which are available free to developers – that essentially allow audio technicians to 'downmix' the six-channel audio (broken into left, right, left surround, right surround, centre and the '.1' subwoofer channel) to play back on any sound card with a standard four-speaker output capability. The result means that gamers can achieve movie-quality sound through two sets of standard-spec PC speakers.

The 'filters' can be used in conjunction with any 3D positioning system to give interactive sound effects on top of the Dolby Digital .ac3 multichannel stream.

With DVD set-ups it's possible to stream eight separate batches of Dolby Digital, with a different soundtrack for every stream, and interactively jump between those eight streams at any user-defined point. Stream one, for example, could carry an 'ambience' track, while stream two could carry 'menacing' tones and track three something 'mellow' – developers simply use game code to jump between the streams to match the on-screen action accordingly.

Furthermore, developers have found ways of interleaving not just eight but 24 batches of 5.1 Dolby Digital (a capability requiring PC owners to have a *Directshow*-compatible software DVD player installed on their machines, plus a four-channel-output sound card).

Psygnosis' forthcoming space-based extravaganza, *Lander* (see **E**65), will represent the first commercial use of Dolby Digital in a game, while other technology licensees include Gremlin Interactive, UbiSoft, DMA Design, Lionhead Studios, Epic Megagames and Shiny Entertainment.

Dolby Digital represents an evolutionary step in PC audio, delivering cinema-style audio for a CPU hit of only three per cent, and it works happily with Creative's EAX (Environmental Audio Extensions) or Aureal's A3D. In Ede's words, it's "total immersion in sound." **Edge** will look at the technology more closely in a forthcoming issue.







Dolby Laboratories' Rik Ede reveals that Psygnosis' Dolby Digital-compatible *Lander* has been tested with recent sound cards from Creative and Diamond with remarkable results

Workstation

Edge's irregular peek at the workplaces of industry types returns, and in the true spirit of Christmas this issue's is a rare insight into the magazine's own grotto. In this instance, it's art editor Terry 'D&G' Stokes, who joined **Edge** two-and-a-half years ago after a stint on Future's Official PlayStation Magazine.



Official Autodesk Dancing Baby "That was left behind by a chap from Kinetix and somehow ended up hanging from the blind. By its neck."

Small collection of spirits "Free alcohol always ends up somewhere on my desk, for some reason."

Indin Magazine of the Year awards "Only here because I stole them from the editorial section. One of them has a bit of a crack in it. Oops."

Russian doll arrangement "We used them in a photoshoot for the inside covers a while back."

Never-used *Gran Turismo* Edge cover "This was the working design for issue 55's cover, but it wasn't used because I thought it was a bit static."

Broken game character models "Mega Man took me ages to build, but recently someone pulled him apart, and now I can't find his head. Similarly, sombody recently cut one of the arms off of [*Final Fight's*] Guy with a scalpel."

Dreamcast fan "This came from the second Dreamcast New Challenge Conference. There's a photo of Yukawa Hidekazu smiling on the other side..."

The trials of a start-up developer: part four



After co-founding Lionhead Studios with Peter Molyneux, Demis Hassabis set up his own development house, Elixir Studios. In need of a publisher to fund Elixir's development, he heads for E3 in Atlanta…

Gathering momentum

"Every May, the games industry gathers for E3, the world computer games fair. This year it was in Atlanta. It's an awesome sight; imagine a building 11 times the size of Old Trafford housing 5,000 games and 40,000 people, all in sweltering 95-degree heat. Love it or loathe it, if you're in the industry, you have to be there. If taken advantage of, E3 can be a very cost-effective way for a new developer to introduce themselves to a series of publishers, especially as most of the big players are based is the US.

With just two weeks to go, I had a crunch decision to make. I had been funding Elixir entirely with my savings and I was almost broke. My funds could just about stretch to a plane ticket to Atlanta (assuming it wasn't already too late to book one) but certainly not far enough to be able to stay in a half-decent hotel. A more important consideration, though, was the fact that we didn't have any product to show yet – neither cool graphics nor a demo.

One solution was that Joe was going to be out in Atlanta with his company and I could probably kip on his floor. I still had to sort a flight out, though. The only one I could get was on 'Dodgy Unsafe Airlines' and this turned out to be an indirect 16-hour flight via Mongolia (a popular destination, I'm told).

Before leaving, I contacted a number of publishers that I had come to know over the past six years in the industry and arranged as many meetings as I could. I got a press pack together with updated biographies on the team and sent these out to them. All promised to give me at least a few minutes at the show. As I arrived at Heathrow for my flight I thought nervously about what lay ahead.

It was my first time at E3 and it was every bit as impressive as I imagined it would be. Most of the stands cost over a million dollars to build. It took me a while to realise that there were in fact two exhibition halls and that the second one was as vast as the first. Although it would have been impossible to see everything, I spent a long time trying to take everything in. The majority of games on show were incredibly beautiful to look at, but there seemed to be a distinct lack of original material. This thought gave me confidence for the meetings that lay ahead.

The serious stuff began on the second day, and my preparations had been far from ideal. Sleeping on the floor by Joe's steaming feet is not a fate you would wish on your worst enemy. Worse still, he also talks in his sleep. The expression sleep-talking barely does it justice. I've never met someone who can spout utter rubbish eloquently, defend his position stubbornly, and not remember a single word of it in the morning. Drunk, yes, but asleep?

My first meeting was with one of the biggest publishers in the business. I was apprehensive and managed to get lost twice en route. Although I knew their reputation, I didn't have a significant contact and I didn't know what to expect. The meeting was with the European head of development. He was initially very cagey, and it crossed my mind that he must get approached 100 times a day by people with crazy ideas.

I launched into a half-hour spiel about the backgrounds of the team and my vision for the company. I then went through the financials and gave a very brief overview of two of our game ideas. I was hoping that this would encourage him to give me a follow-up meeting. As the meeting drew to a close I found myself trying to read his reaction. He was being very cool about it all; again I guess a trait that most of the guys at the top have: that poker face. When he invited me to another meeting with his US equivalent in two days time, I knew that I had got my foot in the door.

"The majority of games on show were beautiful to look at, but there seemed to be a distinct lack of original material. This thought gave me confidence"

Over the course of the next few days I endured a gruelling round of similar meetings. I met a number of publishers, all of whom played me with a very straight bat. Overall, they were cautiously interested and most had agreed to meet me again after the show.

During the evenings I went to a couple of the industry parties. Contrary to what they may seem, these are actually important places to do work and make contacts. It's like going to a party with people you don't know and that you have to make friends with as quickly as possible. You have to be on top-small-talking form and try to be impressive the whole time – not easy, considering the amount of alcohol on offer. At one of these soirees I got to meet Shigeru Miyamoto, the *Mario* genius. This was ruined a little, however, by the fact that Miyamoto's English was about as good as my Japanese!

On the flight back I was sat next to some surprisingly interesting people, one of whom was the owner of Game Station, a chain of retailers based in the North. He told me his story, which was incredible. In just five years, he'd managed to build a chain of 20 stores from little more than a backroom operation. It proves that if you really want it enough, you can almost always get it. I then settled down to sleep, happy in the knowledge that the gamble of going to E3 had paid off. There was a huge amount of work ahead, but things were starting to gather momentum."

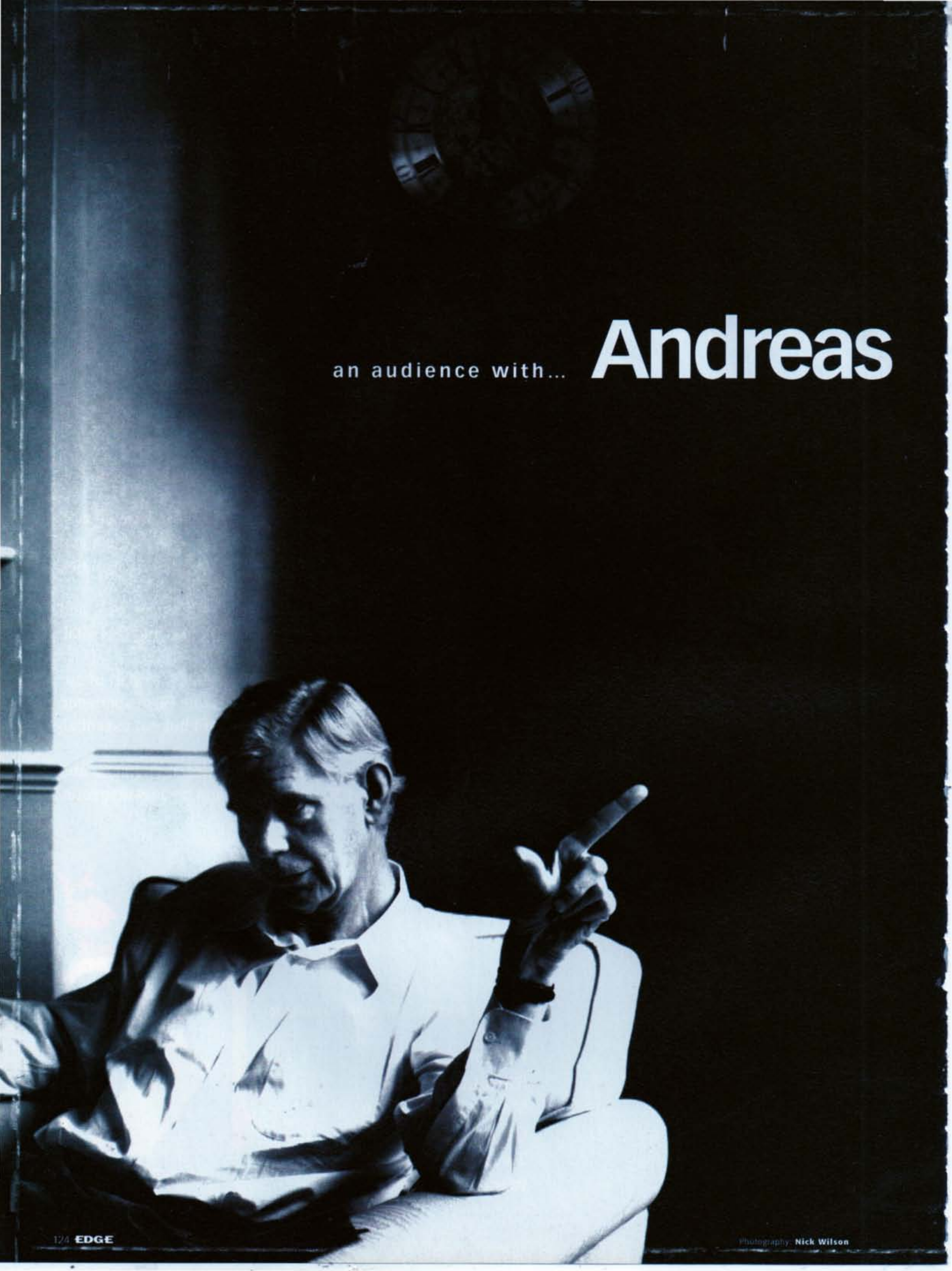


Roughing it: Hassibis gets some rest (babbling colleague not pictured)



Edge moves

Programmers, artists, engineers, producers, animators, project managers – they're all essential to the industry, and they all read **Edge**. The following pages carry a phenomenal variety of jobs for graduates, professionals and any other interested parties who think they could make it in the videogame scene. Apply within…



an audience with...

Andreas

Photography: Nick Wilson

Whittam-Smith

The British Board of Film Classification can jump on the likes of *Carmageddon*, but does its involvement serve or sabotage the self-regulating videogame industry?

Self-appointed moral guardians will no doubt be foaming at the mouth at the thought of SCi's imminent *Carmageddon 2: Carpocalypse Now*, while SCi will be rubbing its hands at the thought of all that free publicity. And with *GTA 2* set to arrive next year, what better time for **Edge** to speak to the appointed moral guardian of all things videogames – president of the British Board Of Film Classification and founder of *The Independent* newspaper, Andreas Whittam-Smith...

Edge: How does your role at the BBFC involve videogames?
Andreas Whittam-Smith: Well, I'm president and, importantly, I and two vice-presidents are designated by the Video Recordings Act. So, before I could be returned as president, my name had to lie in front of both Houses of Parliament for 40 days. I thought it was just a sort of meaningless thing really, but as a matter of fact somebody objected – an elderly peer called Lord Stuart of Croy who I'd never heard of before. And so they had a debate before I could be appointed.

Edge: What were his objections to you?
AWS: In effect, it was a procedural motion. He really wanted to make a substantial statement about games, in particular about *Carmageddon* and some other famous game which I forget now [*Grand Theft Auto*].

Edge: What did he have to say about videogames?
AWS: Oh, he was very hostile. He saw them as having a bad social effect. I tell you all this in order to show you that it's a job where you have an Act of Parliament to administer.

Edge: And what do you think about videogames?
AWS: You keep on referring to videogames. In a way, I'm more interested in computer-generated entertainment and I think that games are possibly the fiction of this new medium. That sounds very pompous, I know. So, I think they're very important. I think that a lot of people see how this new interactive medium can have a fiction form as well as informational topics. I think it's possible that games are the beginning of something very interesting.

Edge: The beginning of an art form?
AWS: Art form is too big a word. Those novels sitting on that table in front of us – there are bad novels, good novels, pulp fiction, all sort of things.

Edge: But films, say, have pushed back the boundaries of what's acceptable on screen through their nature as an art form.
AWS: Well, what happens is that mediums develop their own voice. So, to begin with, the cinema was merely a camera in front of the stage. But it very quickly became the cinema. To begin with, television was a camera in front of someone reading a news item but it very quickly became television, not something else. And what's really interesting about interactive mediums it's that they're at that stage where they're becoming themselves. When you had CD-ROMs with pages turning as if it was a book, that was a perfect example of what the medium wasn't. It has to find itself and it's in the process of doing that. Games are an important part of that. You may not think so when you look at a typical shoot 'em up, but then all art forms have a completely wonderful mixture of the bad, the mediocre and the brilliant.

Edge: Turning to the BBFC's work, who is actually responsible for the classification of videogames?
AWS: The thing perhaps to say by preface is that the board receives 400 films a year to classify for the cinema, 4,000 videos a year and not very many games.

Edge: And it's still not mandatory to bring games to the BBFC?
AWS: It is mandatory if the subject matter of the game comes under the ambit of the Video Recordings Act which deals with harm to the viewer and harm to society via the actions in the game. The famous *Carmageddon* is a perfect example because it comprises, to some extent, driving cars which run people over. So, there is certainly an argument to be had as to whether it encourages joyriding or dangerous driving. On the other hand, I don't see how *Myst* could ever come under the Video Recordings Act. So, games are on the borderline.

Edge: Who actually assesses games?
AWS: There are 20 examiners and they work in teams of two. They write an elaborate report and if they see a problem a second team comes aboard. If it's very much a matter of policy or a decision that's difficult or likely to be controversial then I'm called in.

Edge: And what experience do these teams have of videogames?
AWS: Oh, quite a lot. Some of them are experts. The standard of the examiners is extremely high. I think we last had 4,000 applicants for four jobs. A successful applicant then does a five-year contract because we don't want people with no experience of ordinary life. They come from ordinary life and then go back to it. Compared to some of the editorial teams I've had to work with, the standard is very high and they're certainly very expert.

Edge: And are the criteria they apply to videogames the same as the ones applied to a film?

AWS: Yes, it's the Video Recordings Act. It's exactly the same.

Edge: Do you think they should be the same?

AWS: Uh... it's not for me to answer that question. As I have a position of administering a piece of law, I should confine myself to that. If I wasn't administering a piece of law I would give you a view but I'm not going to as I have this job.

Edge: But do you think that by being an active participant rather than a passive viewer, that the videogame player is more morally implicit, that videogames are somehow more dangerous in their effect than films?

AWS: That's an interesting question. There are different versions of harm. Videos which show how to break into a car or how to pick a lock are one form of harm. The other day I saw the opening of a film aimed squarely at the very young which had a child locking himself in a washing machine pretending to be a spaceman. Now that, to us, is straightforward harm because we don't wish young kids to think it's safe to lock themselves into washing machines.

Then you get into more difficult areas of harm which is whether or not violence is likely, under certain circumstances, to encourage greater use of violence than is otherwise the case. Now, here we are influenced by recent Home Office research which tackled young offenders. It looked to see what they were viewing, then, six months later, asked them recall questions. Out of this came a hypothesis – and it is just a hypothesis, there's no proof – which is that if you have a disposition towards violence – which may come from having, who knows what, let's say a violent family background – then you'll take out more violent videos, you'll watch them longer, rerun them and remember them. So the hypothesis is – and it's plausible – that these videos may validate your violent behaviour and encourage you to be more so. If you don't have this disposition towards violence then you can watch things non-stop for 100 days and it'll make no difference. I find that plausible until a better hypothesis comes along.

So when we're looking at violence, there's a lot to look at. We're always thinking about the extent of it, the context, the way it plays out reality. What, finally, we're trying to estimate is what someone of a violent disposition will take away from it. Take the film 'Crash', for instance. When I saw the video, I didn't hesitate, I passed it straight off. I thought it was weird sex between weird people. It was a cold film, hardly imitable, unlikely to appeal to a large audience, so its chances of generating harm were minimal.

Edge: This comes back to the idea of cinema being an art form. 'Crash' would be classified as an art film, as an intellectual film. But videogames aren't generally thought of in the same way.

AWS: They can be. Anything can be. We're engaged in a trade – I say that because I still consider myself a journalist – and journalism is everything from just jobbing and writing, to pieces by Neil Ascherson that are so good they rise to the level of art. That's also bound to be true of computer games. So, I don't say that just because they're a game they can't rise to the level of art – of course they can. Any medium can. Cinema rises to levels of art. But it often doesn't. It's often trash.

Edge: James Ferman [director of the BBFC] was quoted in industry trade paper *CTW* recently saying that he was concerned that points were being awarded for running people over in *Carmageddon 2*...

AWS: Well, if you're seen to get a reward, admittedly a fictional reward, and you have this extra dimension of participation, as you raised earlier, then that's speaking to the heart of the Act. When thinking of what classes of people are likely to use the game and be influenced by it, we have to consider that most crime is committed by young men aged between 16 and 25. This game aims directly at them, so that's why this is a sensitive issue.

And your point, that videogames, with their intensity of participation, are even more powerful than sitting passively in front of a screen, may be right. I don't know if there's any research to say so but you may be right. The more intensive it is, the more careful we have to be administering the Act.

The fact is that the moving image – television, film and video – is more heavily regulated than any other form of communication. That's because the powers that be think that it's in a way more potent. There's a second point which is, 'Does it come into the home?' and a further point, 'Does it come into the home unbidden?' We think that videos come into the house, to some extent, unbidden – somebody specifically buys one but the other people in the house may put it on perhaps not knowing what it is. The bottom line of what we're trying to do is help parents regulate their children's viewing. The evidence is overwhelming that that's what parents want somebody to do.

Edge: How does that apply to videogames, especially as they're so orientated towards the young?

AWS: Well, they don't often drift into our territory but when they do the question is 'Will they encourage anti-social behaviour?' That's the bottom line.

Edge: And are they more likely to, compared to films or videos?

AWS: Well, by number less likely. But some games have a power equivalent to a film.

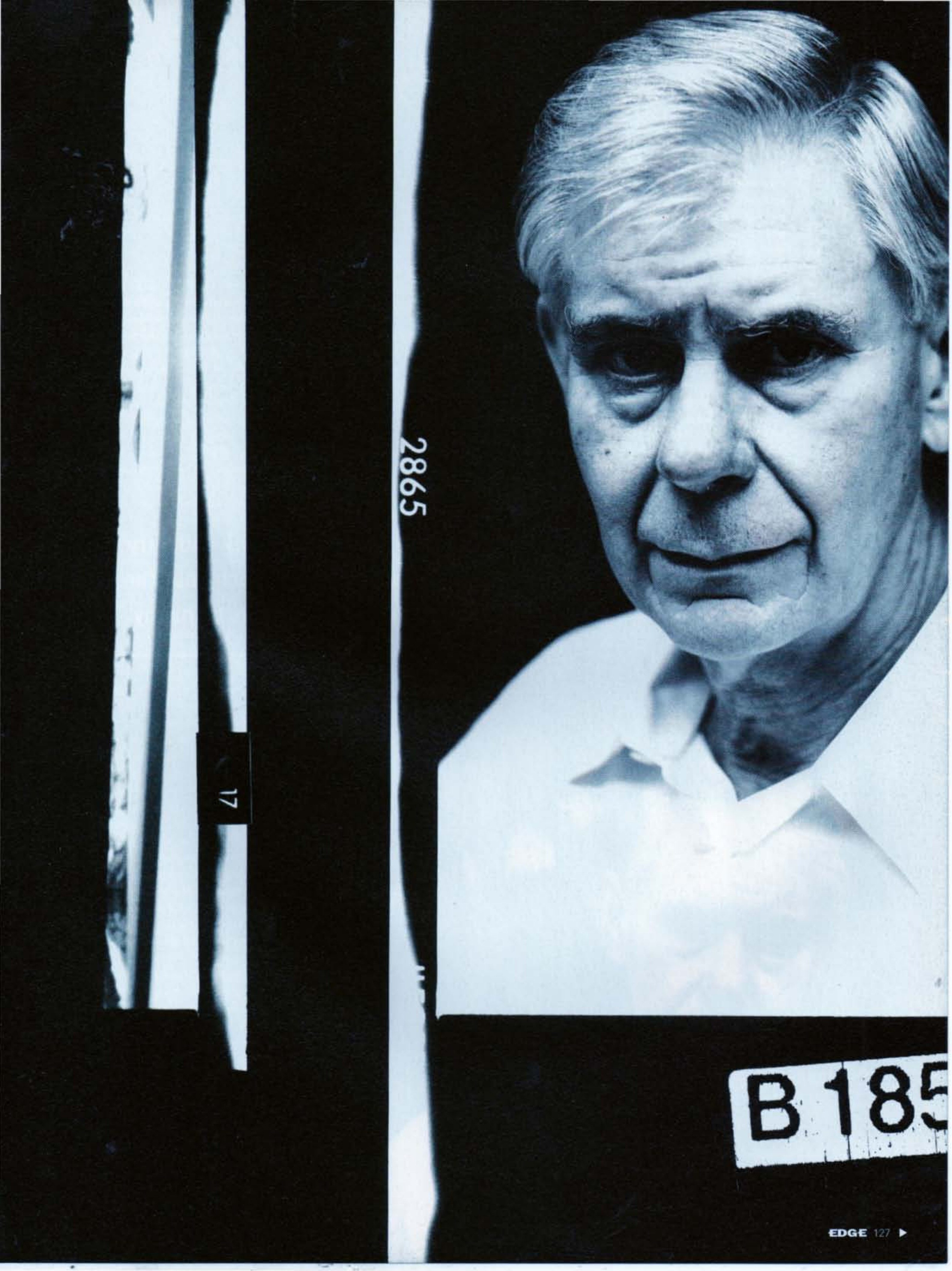
Edge: You think the potential is there then?

AWS: Yes. And I also think we will see the quality – that is, the visual quality – of games go on improving, getting closer and closer to your experience of a straightforward film in the cinema.

Edge: At the moment, a lot of the violence that goes on in videogames is abstract and cartoonish. As that changes, will the BBFC get involved in videogames classification?

AWS: When that changes, it will come more and more under the ambit of the Act. The other thing to remember is that this is not simply an old fuddy-duddy piece of legislation that's left on the statute books which we pedantically enforce. The original Act is 1984, it has been amended twice and there are regular debates in Parliament. There has not only been a debate about my appointment, there has been a subsequent debate in the House of Lords, so it's a very live issue. Political pressure is there all the time.

"[Videogames] don't often drift into our territory but when they do the question is 'Will they encourage anti-social behaviour?' That's the bottom line"


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Edge: Another form of pressure must come from the moral panics in the press about games like *Carmageddon 2*. Are they major issues for you or just blown out of proportion?

AWS: Well, I think the board's difficulty is that it operates precisely in the no-man's land between two armed camps. The larger of the armed camps is the pro-censorship camp which has a lot of MPs, a lot of groups and some newspapers on its side. Then there's the liberal, anti-censorship camp. The first camp is ten per cent, the second camp is five per cent; 85 per cent of people don't ever think about it. Whatever decision we reach, there's no way of arriving at one in which all the people are more or less happy. Some will always be unhappy.

Edge: The videogame industry believes that it can keep its own house in order. Do you agree?

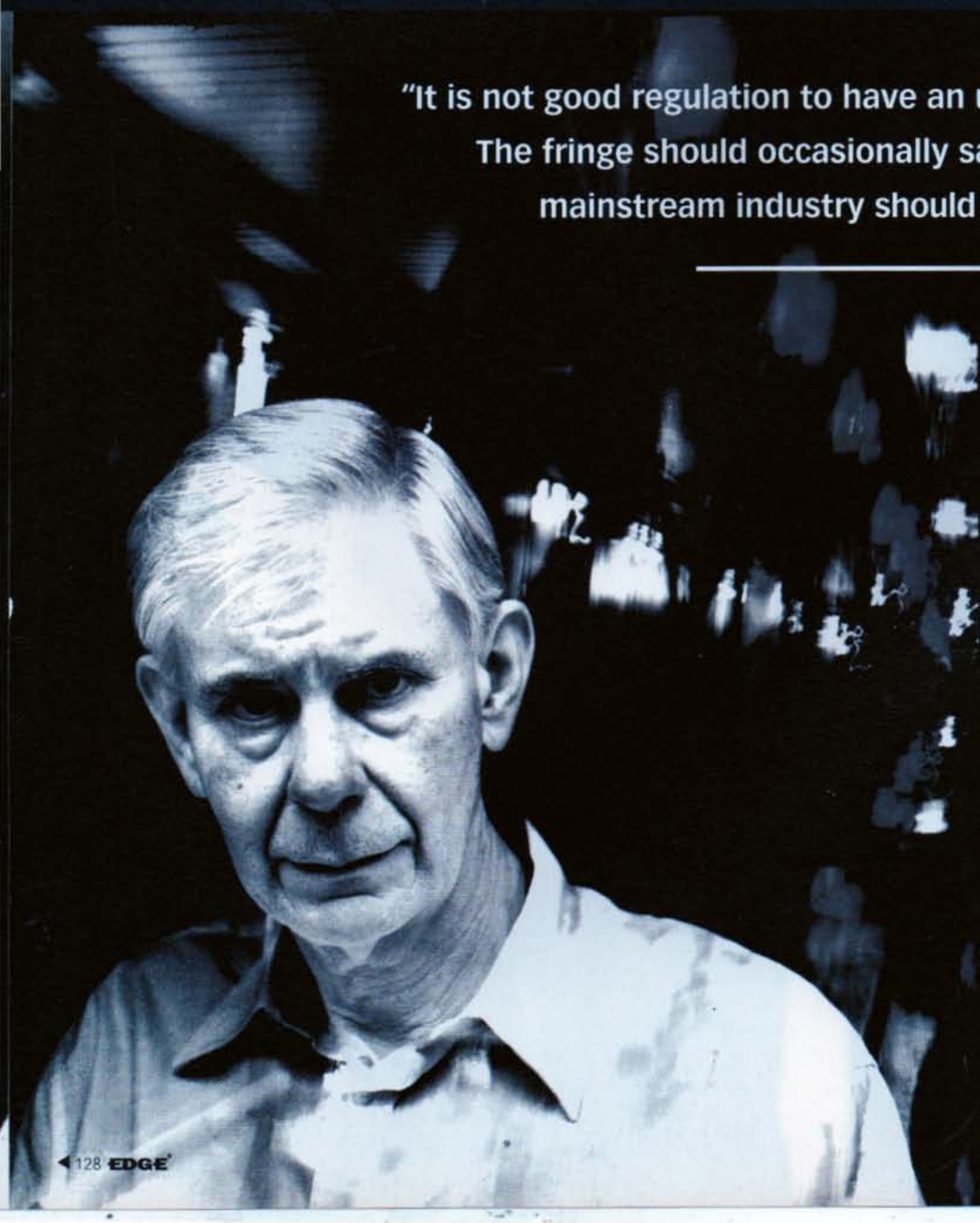
AWS: Well, to a large extent it does. It has its voluntary system [ELSPA and the VSC, see p79] and I think that self-regulation is very important. It always has an advantage over statutory regulation in that it's much more flexible. New things arrive all the time, new genres, things we haven't thought of at all. If we were trying to get new legislation in this area we'd have no chance – ministers struggle over which bills to keep in the Queen's speech with all the House of Lords stuff. That's the problem with legislation, you can't change it. So, I think voluntary regulation has a big part to play, but we're the backstop. Legislation is the backstop.

Edge: But can the legislation keep up with the pace of change in videogames?

AWS: We'll have to see. If there became a gap we'd have to try and get legislation. I don't think at the moment there is. I don't think there's any real discomfort in the way the Video Recordings Act applies to games.

Edge: You were talking earlier about how things come into the home. Is the Internet a major concern for the BBFC?

AWS: Yes, that is an important point. Wherever you have regulation, you have a fringe. As soon as you charge duty on goods entering this country you have a smuggling trade. And if you want unclassified, unregulated videos, you go to Camden Market. The question is, whether the coming of the Internet will make the fringe so unmanageably large that it overwhelms the regulated bit.



"It is not good regulation to have an unhappy industry. The fringe should occasionally say, 'Ouch,' but the mainstream industry should always be happy"

I think here we should be cautious. The number of houses connected up to the Internet is still small. Secondly, we will gradually see filtering software which parents will use to manage their children's access. Thirdly, we'll probably get to a situation where all Websites will have to be electronically tapped, and if your Website isn't tapped the browser won't visit it. Now, of course, if you're a very adept user you'll be able to find a way around this but you can begin to see how regulation can apply to the Internet. Where we may have a role is in the area of advice.

Edge: So, should the videogames industry be worried about the BBFC?

AWS: No, the BBFC has a care for it. All regulators should have a care for the industries they cover. If we were to injure it, then we would have done our job badly. If there was a serious problem, and the videogames industry signalled to me that they were unhappy, then I'd have to do something about it. I'd have a duty to. It is not good regulation to have an unhappy industry. The fringe should occasionally say, 'Ouch,' but the mainstream industry should always be happy. It's in their interests to be regulated, at least to have a clean image, whether it comes through our activity or a voluntary system.

POWER STONE

CAPCOM POWERS UP AS IT INTRODUCES ONE OF THE MOST ATTRACTIVE BEAT 'EM UPS EVER

Developer: Capcom
Release: TBA
Origin: Japan











Hopefully, there will be no discernible loss in texture detail in the finished Dreamcast conversion, although it could be a close call…

Capcom's involvement with Dreamcast was inevitable. Porting its arcade titles over to the PlayStation is becoming increasingly difficult as far as retaining the quality of the original is concerned, with the gap between coin-ops and consoles threatening to widen once more. By developing on Sega's Naomi board, titles are relatively easily converted to Dreamcast and the 128bit machine has the potential to recreate its arcade relatives with impressive accuracy.

Capcom announced *Power Stone*, its first Naomi-based coin-op, at the recent JAMMA show. Set in the 19th century, the game is best described as a free-roaming beat 'em up, allowing players to fight within a technologically limited environment. An interesting feature includes the ability to interact with the surroundings. As such, you're able to make use of many of the features that populate the environments, wielding them as weapons. Boxes, barrels, and even lampposts can be used against assailants. Should this prove ineffective, you can always clamber up and over these objects in an effort to avoid trouble.

Power Stone's visuals are looking impressive, with intricate environments and characters. Facial detail – particularly the fighters' expressions (which change depending on the situation) – is equally well realised.





With *Power Stone*, Capcom has managed to maintain the solid and colourful graphical appearance usually associated with its *Street Fighter* series, while bringing in new gameplay

As for gameplay, Capcom has been unwilling to disclose too many specifics, although at least one form of power-up system is expected, in keeping with the developer's continued experimentation in the beat 'em up field.

A Dreamcast version has, of course, already been announced, and graphically, at least, the arcade and home versions shouldn't be too far removed. However, no details have yet emerged regarding possible enhancements for the console adaptation or whether Capcom plans to use the Dreamcast's VMS. The latter would seem likely to happen, though, allowing players to hammer opponents at home and bring saved data to the less comfy confines of the arcade.

Unlike many titles shown at JAMMA, *Power Stone* looks genuinely promising. Huge, bold fighters make it a distinctive-looking game; Capcom will be hoping to deliver similarly striking gameplay, too.



Background interaction will form an essential part of the action



VAPOUR TRX

VETERANS JOHN SALWITZ AND DAVE RALSTON RETURN TO ATARI WITH A ROLLERCOASTER RIDE

Developer: Atari
Release: Out now (US)
Origin: US





Despite the occasional graphical glitch (above), the 3Dfx2-driven appearance is sharp and swiftly rendered

Seemingly inspired by Psygnosis' futuristic *Wipeout* series, *Vapour TRX* runs on Atari's latest 3Dfx2-based board and features rollercoaster-style vehicles. Atari's coin-op offers four circuits (complete with the now-obligatory alternative routes), although players must finish first in at least one of the initial three tracks in order to experience the last example.

Rather than several weather conditions, races occur at different times of the day, thus introducing an element of variety to the environments' appearance. The diversity between the six available vehicles extends to the usual handling, speed, acceleration and durability parameters, although these do not interfere with the ability to carry any of the five level-upgradable weapons.

Out on the track, 16 competitors turbo their way towards the elusive *Vapour TRX* champion crown. While the CPU-controlled opponents get eliminated from the race, human enemies (two twin cabinets can be linked offering potential fourplayer action) simply lose their upgrades before being allowed to continue.





It should be interesting to see how US project *Vapour* is received in arcades currently dominated by increasingly realistic racing titles, most of which originate from Japan



The game is a collaboration between veteran developers John Salwitz and Dave Ralston, responsible for the classic *720°*, and marks their welcome return to Atari.

GAUNTLET LEGENDS

THE '80S FAVOURITE RETURNS WITH A NEW 3D PERSPECTIVE, BUT A MISSING ELF...

Developer: Atari
Release: Out now (US)
Origin: US

First shown in Alphas (**E**63), this polygonal reworking of one of the '80s' most popular coin-ops should get most **Edge** readers groping for loose change. Valkerie, Warrior and Wizard seem perfectly adapted to their new 3D isometric perspective, but Elf was nowhere to be found in the version **Edge** played, having been replaced by Archer. However, other features, such as food, potions, treasures, traps and teleports have made a return, retaining the essence of the original.

The addictive fourplayer mode is still included, as is the two-button gameplay structure. But characters now have three special attack moves, as well as an upgradable power system, allowing the use of invisibility, invulnerability, plus bolts of energy to combat all the monstrous beings.

Completely new features include the shops you're able to visit at the end of levels in which hard-earned treasure can be spent on superior equipment. More interesting, still, is the use of obstacles, stairs and platforms, now possible due to the extra dimension in the level designs. The four huge levels feature many of the aforementioned structures while hiding their share of secret rooms and passageways, in the true spirit of the fantasy theme that so defines the *Gauntlet* series.



Naturally, the visual quality of coin-ops has somewhat evolved since *Gauntlet* last ruled the world's arcades







Although now sporting a new perspective as well as an extra dimension, *Legends* retains most of the elements of its classic predecessors

Legend of Zelda: A Link to the Past

Released at a time when many console owners weren't even convinced that overhead-viewed adventures from Japan were for them, NCL's 16bit action-RPG wasted little time in revealing its colours as a legendary creation







An onslaught of outraged chickens reveals the game's sense of humour (main). The quest begins in atmospheric style... (right)











A bewildering range of items lies at Link's disposal (centre left). Switch mechanisms enable progress (left)

Although it's difficult to choose one specific standout title from Nintendo's absurdly extensive range of accomplishments, the third game in the *Zelda* series gets **Edge**'s vote as certainly the greatest 16bit console adventure ever created.

The two NES instalments that preceded *Link to the Past* hardly prepared gamers for the 16bit update. Sure, both titles featured a similarly simplistic graphical style and lightweight, pseudo-RPG leanings, but the SNES version's overwhelming depth (an aspect not at all evident at the outset of your quest) pushes it much further into the realms of 'serious' gaming territory.

Although the action starts out simply enough, with Link setting off from his humble home on a rainy evening – only vaguely aware of what might lie ahead – as dungeons are explored and boss characters vanquished, the fledgling hero develops dramatically thanks to a dazzling assortment of equipment that becomes available. A hookshot, a boomerang, a wildlife-gathering net – the list of 'power-ups' goes on and on, and is



probably without equal in a videogame. And these aren't merely a selection of ever-more-powerful weapons (even though stronger swords and armour do appear); they are in fact crucial components in making your way around the game's substantial map (whose dual-form existence, as a light and a dark world, is one of the most inspired game elements ever realised) and the formidable dungeon complexes.

What's perhaps most notable, though, is *Zelda III*'s feeling of sheer *completeness*. Like all of the best videogames, everything seems to have a place – and fits in it perfectly. Some prefer the Game Boy sequel, but the scale, complexity and charm of *Link to the Past* make it a truly legendary title with scant few peers.









One of *Zelda*'s many genius touches is the way new areas are introduced, but remain unaccessible until you have a vital tool in your possession

Publisher: Nintendo	1991	Developer: In-house	SNES

Marantz MR2020 Layla Music Centre

£500 Contact: 01753 680868



It's true, the music centre is back. The near-inexplicable fashion for everything '70s has now filtered down to the world of hi-fi. To be honest, Marantz wasn't the first – check out the numerous one-box minis, micros and hi-fis for that – but the Layla is arguably one of the best.

Originally unveiled at the Consumer Electronics Show in Las Vegas, Layla throws the hi-fi rule book away and opts for something altogether more esoteric and arty instead. Eschewing the conventional front-loading approach of modern CD players, the Layla hides its disc-spinner under a smoked-glass lid, complete with four stick-like silver switches that control the major functions. Wave a hand over the built-in sensor and the lid glides back, then up, to reveal the player and the other controls, all coloured in gorgeous brushed gold. The Layla's USP, of course, is that it also comes with its own amplification, tuner and speakers, making it a truly beautiful thing to look at, while it sounds rather good, too. Stick on any kind of music and the 25W-per-channel system does a creditable job of cranking out the tunes with precision, clarity and detail. A cracking piece of kit.

Sony VAIO Note PCG-505G Notebook PC

£2,302 Contact: 0990 424424



Laptops are getting smaller, cooler, cuter. Apple might have started the trend with its incredibly curvy G3 PowerBook, and now Sony's in on the act with a supermodel-thin and sexy laptop.

The immediately striking feature is the way the 505 looks – a splendid mix of silver and purple magnesium alloy that's just as much of a fashion statement as the iMac. It's beautifully made and when closed is about the same size as a sheet of A4 paper and not much taller than your average stamp. Inside, the Sony boasts a 233MHz Pentium MMX chip with a 2.1Gb hard drive and super-slinky 10.4-inch LCD display that's not only bright and clear but displays images with the minimum of smearing. Other goodies include 32Mb of SDRAM (expandable to 96Mb), a PCMCIA slot and *Windows 98*. Naturally, being so small, Sony hasn't been able to include a CD-ROM drive, floppy drive or much in the way of ports in the case, but it has included them as add-on peripherals in the overall packaging, as well as a 56K modem and stacks of other gubbins, too.

Best of all, the VAIO works phenomenally well: the keyboard is neatly laid out and easy to use, the mouse touchpad proves surprisingly responsive, and it zips along at an impressive rate. It really is a king among laptops. IBM and chums should be very worried...

New government rules mean that manufacturers are no longer obliged to provide recommended retail prices on certain consumer electronics products.

Tiger Electronics Furby

£30 Contact: 01423 501151

Best place that order now, because Furby looks like it's going to be the number one hit with the kids this Christmas (see DataStream, p141). Looking almost like something out of *Gremlins*, Furby is a furry virtual pet. This cutesy little character sings, talks, laughs, cries, dances, sleeps and purrs for as long as the four AA batteries in his bum keep him juiced up – and as long as you don't neglect him, either.

One of the strangest things about Furby, though, is that he not only talks his own language (Furbish) which you're obliged to learn, but if you get a gaggle of the little chaps together, they all start interacting with each other as if they're really alive. Naturally, it's all done with sensors, motors and voice sensors, although exasperated teachers, parents and colleagues won't care come January. At £30, Furby also makes a practical and more affordable alternative to Microsoft's Barney (the duo-tone dinosaur), even if the latter is educational. But what kid will want to learn about stuff when furry friends are more fun?



Sony SLV-F900 SmartFile VCR

Contact: 0990 111999

One of the perennially annoying things about recording stuff off the TV is that it's often impossible to locate a blank tape to record the programme on in the first place, and then it's impossible to remember on which one it has been taped. One solution is a pen, piece of paper and an organised mind; the other is something high-tech like the SmartFile VCR.

This four-head Nicam stereo machine comes with its own system for storing info about each tape in your VHS collection. The first part is a special label which is attached to the videocassette itself, the second is a sensor on the VCR fascia. The label essentially stores that all-important information about a tape's contents – including the time and the date a programme was recorded and how long it lasts – and enables you to enter your own programme title information so you're not likely to forget what's on where. To retrieve the information, simply wave the tape at the VCR sensor and all the relevant details pop up on-screen. The SmartFile can't do everything, of course. It can't be used to catalogue existing VHS collections, and there's always the danger that shops won't stock additional labels or that Sony might even stop making them…

But even if that does happen, this is still an excellent VCR. Sound and picture quality are superb, gizmos like VideoPlus+ and PDC make it a doddle to use, and it looks pretty sleek. Another winner from Sony.







Edge has attempted to state prices wherever possible, but for up-to-the-minute information, check adverts in the national press or contact your local consumer electronics dealer.

Squeakadelica

UK: October 15 witnessed Wireplay's Quakeadelica event, designed to lure *Quake II* players out of the gloom in order to determine the identity of the nation's loneliest man (AKA the best *Quake II* player). After successfully competing in the three regional heats held recently across the nation, eight finalists made it to the Ministry of Sound where an elaborate assortment of PCs and cables awaited them in one of the club's 'rooms'. Under the expert guidance of squeaky presenter Jo Guest, the contestants (who all claim to spend four to five hours practising on a daily basis) proceeded to blast their screen-based polygonal alter egos to smithereens until, after a tense final, only Billox (21-year-old James Page) remained.

As part of his reward – which included an all-expenses-paid trip to New York to play in the AMD PGL (Professional Gamers League) – the UK champion then engaged in an exhibition match with Thresh, America's top professional player who'd flown in for the event. Despite a valiant effort (and a £2,000 incentive to beat Thresh), and what must have proved the most distressing experience of his entire gameplaying career, Billox emerged from the conflict admirably, psychological scars barely apparent. In 20 short, frantic minutes, the 21-year-old US champion had demolished Billox with a rather convincing 56-to-1 defeat. Rumours that Billox has since sold his PC and can now be seen juggling in Convent Garden are unfounded.







Quakeadelica succeeded in tempting hardcore *Quake* fans out from behind their monitors to, er, play *Quake II* in front of a crowd of know-it-alls. Even the talents of Joanne Guest proved to be of little distraction for these very focused individuals

Lara's natural history



UK: After instructing its invitees to attend the *Tomb Raider III* launch ceremony appropriately attired (smart casual), Eidos kicked off the proceedings, held at the stylishly lit Natural History Museum's entrance hall, and hosted by TV and radio bod, Jonathan Ross. Before he had a chance to entertain the crowd with his electric blue suit, though, the lights dimmed and a certain Ms Croft could be seen running up and down the hall's steps, pausing and pointing her guns along with the music in a choreography that would easily rival any of Andrew Lloyd-Webber's West End productions. Everything was going smoothly until the well-rehearsed routine required 'real' Lara (22-year-old model Nell McAndrew) to briefly swap spotlight with 'stunt' Lara, there to perform a couple of backflips. Not only did the fumbled exchange occur in full view, but, at approximately half the size, 'stunt Lara' looked remarkably unlike her model counterpart (and the black lycra top, instead of Lara's signature mint-green number, proved a bit of a giveaway).

Nevertheless, Ross took over and the audience was treated to a '*Tomb Raider* phenomenon' overview before being shown snippets of the curvaceous aristocrat's latest adventure (see p97). Then, just as the crowd thought Eidos was warming up to unleash the usual interminable PR experience, the presentation concluded. Surprised members of the industry and press were free to mingle, delighted at the brevity of it all. And the prospect of the reopened complimentary bars, naturally.




The 'It' girls are always at the best parties. And Edge, of course

Lara's natural charms

UK: Past efforts at translating videogame brands into the realm of credible streetwear have been few and far between. **Edge**'s readership is shielded from some of the more risible articles of clothing that arrive in the office – only a few *Wipeout*-related items and the recent PlayStation range have managed to scrape into the 'okay to be seen in public' category. It was, however, only a matter of time before the ubiquitous Ms Croft arrived on the scene.

Designed by sports couturier Animal (as was the PlayStation collection), the large 'Lara©' range includes T-shirts, sweaters, a fleece top, a jacket and, oddly, a dressing gown. For those wishing to get closer still to the videogame 'legend', watches, rucksacks, wallets and towels are also available. Marks & Spencer also has a range of Lara gear on offer, which includes such stocking fillers as ties and socks. But it's okay, they do refunds.







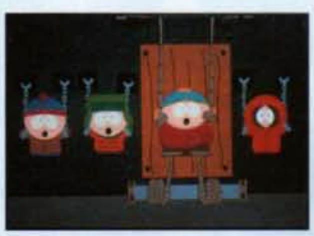


Lara bag, sir? Oh. You're after the Lara figurine. Whatever floats your boat…

Desktop deviants

UK: Screensavers: the armpit of digital entertainment, and therefore not a topic **Edge** usually touches upon. However, an unabashed appreciation for Comedy Central's still-funny-despite-saturation-point-merchandising 'South Park' cartoons is the excuse for mentioning *South Park – The Official PC Desktop Theme and Screensaver*.

While Telstar's effort is considerably less interactive than Iguana US's Nintendo 64 and PC take on the series, it contains multiple animated screensavers featuring the many deaths of the unfortunate Kenny, and a cameo appearance by the repulsive Mr Hankey (the Christmas poo). Of course,



Cartman, Kyle and Stan all make appearances, too.

Also contained in the package are PC desktop themes and wallpapers. (Whether their inclusion really justifies the £20 price tag, however, is another thing altogether.)





'Yeah, I want cheesy screensavers!' The 'South Park' kids get exploited for Christmas

The worms that turned

UK: In a surprise announcement in October, Team 17 announced the development of *Worms Armageddon*… for the Sinclair ZX Spectrum. **Martyn Brown**, development director at the Wakefield-based codeshop, said "The Speccy version of *Worms Armageddon* has allowed us to do some really pretty 16-colour graphics and one-channel sound. It may come as a surprise to some that we've developed for the Spectrum, but it's only cost us £150-odd to do." He further promised "no poncy FMV" and a "seven-minute loading time."

After countless industry types took the story as read, the existence of Spectrum *Worms Armageddon* was rapidly proved to be a rather elaborate bullshitting exercise on Team 17's part. Brown had concocted the story purely to fly in the face of hype surrounding Dreamcast and other forthcoming technologies. Heaven knows what Team 17 are planning for April 1.





Team 17 even went to the trouble of mocking up a genuine-looking screenshot, replete with colour clash

Diesel power







Probe's forthcoming sequel, *Extreme-G 2*, is another title that will bear the Diesel mark

UK: While the new Lara© range (see previous page) is the product of a recent Eidos/Animal collaboration, fashion house Diesel has been heavily involved with PlayStation culture for some time. Its desirable limited-edition PlayStation (right), and the production of *G-Police*-related clothing for Psygnosis, are, according to Diesel's **Bob Shevlin**, "Not marketing-driven, but more creative-driven.

"Our designers work – sometimes in the actual game studios – on how best to communicate Diesel branding in game environments," he explains. The latest tie-ins are *G-Police 2* and *55DSL Extreme Sports* (exclusive shots of both are shown below). For the former project, logos generated by Diesel designers have been scattered throughout the game, while the latter title is a snowboarding/mountain biking/bungee-jumping Dreamcast game featuring – unsurprisingly – 55DSL winter sportswear. Cool.



One day, all consoles will be made like this















Having created a 16-piece range based on the *G-Police* series, Diesel's designers were enlisted to supply artwork for the follow-up













Diesel is supplying an as-yet-unnamed publisher with its 55DSL sportswear designs for this interesting new Dreamcast title…

DataStream

Number of Furbies to ship to the UK this Christmas: **350,000**
Number of Gamestar PlayStation Steering Wheels sold by Dixon's per week in the lead up to Christmas: **20,000**
Percentage of adults in the UK that are teetotal: **16%**
Number of people living on less than $1 a day: **1.3bn**
Number of Pokemon units sold to date: **8.84m**
Number of *Pocket Monsters Pikachu* units sold within first three days of release in Japan: **1m**
Number of Game Boy *Tetris* carts sold to date: **35m**
Number of **Edge** readers who intend to purchase a Game Boy Color: **24%**
Number of polled *Famitsu* readers who think Neo Geo Pocket is destined to be a failure: **314**
Number who think it's likely to be a success: **8**
Percentage of **Edge** readers who are homemakers: **0%**
Percentage of **Edge** readers online: **76%**
Number of emails Santa Claus received last year with present requests: **30,000**
Amount Intel has donated to the digital technology gallery in the London Science Museum: **£1.5m**
Amount Intel earnt in just 45 minutes during the last financial quarter: **£1.5m**
Amount of time online a new AOL subscriber would have to spend for the first month in order to benefit from the 'unbeatable' free offer: **17 hours a day**

Sources:
Media Week
MCV
The Guardian
Edge Readership Survey 1998
www.msu.edu/user/dynicrai/xmas/santa.htm
www.segax.com





Small talk

Japan: Originally shown at last year's Nintendo Space World exhibition in Tokyo, *Pikachu Genki De Chu* is a curious blend of the Game Boy favourite and voice recognition software. Supplied with the headset pictured below, the N64 title allows users to communicate with the infamous virtual pet, Pikachu.

The yellow fellow is found wandering his gameworld and can be called over. Then, depending on what you say, he expresses 'emotions' such as happiness, surprise and affection. However, Pikachu is not alone in his idyll – there are around 150 other creatures from the *Pokemon* series to discover, including Fushiguidane, Nazonokusa and Coil. All of these virtual pests can be found wandering the forests, plains and beaches of their world and you can spend *hours* chatting to them.









Sega burns home



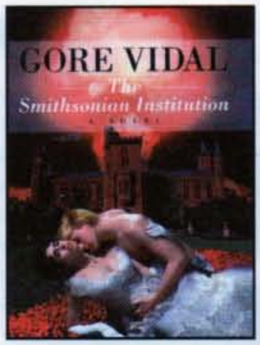


Dricas' Event Report is promising. The site just needs some Events to report

Japan: The first flavour of Dreamcast's online presence has appeared in the form of the console's Dricas homepage (www.dricas.com). The simple menu appears at 640x480 resolution (Dreamcast's own), offering two options: Events Report and Game Burn. At the time of going to press, the site was still under construction and the Events section had little of interest (assuming you have access to a Japanese language operating system), other than a brief report from Sega's New Challenge Conference and the Tokyo Game Show.

The more promising Game Burn segment of the site is intended to provide previews and news about forthcoming titles. Currently listed are *Blue Stinger*, *July* and *Sonic Adventure* – in a fairly limited form. More interesting content is promised for Dreamcast's November 27 launch.

THE SMITHSONIAN INSTITUTION

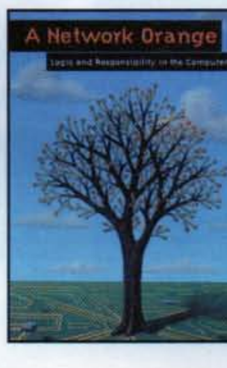


Author: Gore Vidal
Publisher: Little Brown and Company
ISBN: 0-316-6450-4

Science fiction began with the concept of time travel – more specifically with HG Wells' 'The Time Machine'. Were he alive today, Wells would no doubt be surprised that his idea has become so popular. It's harder to predict his reaction to 'Back To The Future'. It's likely he would approve of Gore Vidal's take on the genre, however. Like Wells, Vidal is as concerned with raising sociological issues as with the idea of time travel. 'The Smithsonian Institution' strikes a neat balance between the two. Set at the start of the WWII, a 13-year-old called T is summoned to the institution following the discovery that he can visualise complex quantum events. He finds himself at the centre of a bizarre space-time continuum within American history. Before long, he decides the only way to stop the war is to play fast and loose with the past. As is traditional, the consequences are not what T planned.

Vidal's 24th book shows that you don't need to be under 30 and dressed in Armani to successfully utilise science in a novel. Vidal also ruminates on superstring theory, parallel universes and mixing cloning with time travel. There will be few more accomplished novels this year.

A NETWORK ORANGE



Authors: Richard Crandall & Marvin Levich
Publisher: Copernicus
ISBN: 0-387-94647-0

You'd expect to find little in common between a computer scientist and an academic philosopher, so all credit to Richard Crandall and Marvin Levich, scientist and philosopher, for writing 'A Network Orange' together. Subtitled 'Logic and Responsibility in the Computer Age', it's an attempt to focus on the fundamental issues thrown up by the computer. Thousands of books have been written on the subject, but what makes this interesting is the framework Crandall and Levich use to structure their argument. They suggest that the questions posed by technological change are the same as those a liberal arts education was designed to answer: Does history have direction, human life a purpose? The book concentrates on the impact of computers in teaching. Other subjects include AI, the philosophy of hardware and the future of multimedia. They are broadly sceptical of the so-called advances of the computer age, and drawing on the issues first put forward by Joseph Weizenbaum, of *ELIZA* fame, 'A Network Orange' brings those seminal arguments up-to-date. Faster isn't necessarily better, and a multitude of facts is not the same as knowledge. Neither Crandall nor Levich are luddites, though. Their criticisms are specific and well grounded. As Moore's Law drives the industry upwards and the gap between human responsibility and computer power grows, these problems will refuse to go away.



LASERDISC
Titanic
(Pioneer)
£30

DVD may have made a big splash in the US and seems headed this way, but only a fool would dismiss laserdiscs just yet, particularly if releases such as this continue to support the UK's relatively small, but loyal, LD user base. Yes, LD resolution is not quite as high as its new versatile cousin, but often, by the time the DVD version of a major release hits the street, LD owners have been placing the silver platter on their player's 12-inch motorised tray for weeks. And as far as *Titanic* is concerned, having only recently joined the new digital format bandwagon and to the understandable frustration of thousands, Paramount has yet to announce a release date for the DVD version of this year's winner of 11 Academy Awards.

Carrying THX certification (for optimal visual and sonic reproduction) and keeping its original theatrical widescreen aspect ratio (that's 2.30:1, fact fans), this is 189 minutes of impressively sharp images, gloriously reproduced colours and a richly engaging Pro-Logic score capturing the essence of James Cameron's filmic extravagance with remarkable aplomb. Silly, irrelevant sub-plots involving Leonardo DiCaprio and Kate Winslet aside, the combination of Cameron's camera work and Digital Domain's astounding CGI sequences make compulsive viewing. *Titanic* is cinema on a massive scale, and no matter how large your widescreen television set is, only a projector will do it justice.



IN ORDER TO DANCE PRESENTS...
Free The Funk Vol3
(R&S)

An album from European electronic label R&S bearing the word 'funk' may seem like a bad joke – actually, it's hard to imagine a more tempting concoction of left-of-centre groovers. Nicollete gets to do her contemporary Billie Holiday thing on the much loved 'No Government', DJ Food, Howie B and Skylab all turn in stellar offerings, and even cuts from less familiar acts such as Leila and King Wasp prove just as addictive. Classy lounge music for the next millennium.



SUN ELECTRIC
Via Nostra
(R&S)

Connections with KLF's Jimmy Cauty and Dr Alex Paterson didn't harm the profile of Sun Electric's earlier work, but 'Via Nostra' is far more closely related to Kraftwerk than these relative newcomers. Not that this is another tired trawl through early electronica – there's a purity to the sound that recalls the original dance pioneers. The equipment used and noises created are a different matter, with the tracks turning sequencing into an artform. Loops and repetition are almost non-existent on what's almost classical in its beauty at times, and as weird as Aphex Twin's oddest offerings at others.



FATBOY SLIM
You've Come A Long Way, Baby
(Skint)

The underrated Freakpower albums may have failed to capture the public's imagination, but practically every other one of Norman Cook's projects has struck gold, and no more so than the Fatboy Slim alter ego. Having stolen the acid-tweakin' crown from Josh Wink with the first album, he's now decided to lay waste to big beat and hip hop. The vocal chopping of 'Rockerfellar Skank' gives a good indication of the harsher cut-and-paste use of samples here – though, thankfully, there are a handful of playful riffs on hand, making the likes of 'Kalifornia', 'Soul Surfing' and trumpet-led current single 'Gangster Tripping' lighter work. When Cook turns his hand to these carnival-like tracks he's untouchable.

VIEWPOINT

EXPRESS YOURSELF IN **EDGE** – WRITE TO: LETTERS, **EDGE**, 30 MONMOUTH STREET, BATH, BA1 2BW (email: edge@futurenet.co.uk)

I'd like to express my feelings concerning the piracy situation that has been gathering momentum over the past year or so. Prices of CD-ROM writers have been steadily falling, putting the technology into the hands of even schoolchildren. I personally own a Philips CD writer, and yes, I do copy PlayStation and Nintendo 64 games for my own consumption. But this is not a letter that is intended to condone or even applaud the practice of piracy – far from it.

I now own around 200 PlayStation games and every Nintendo 64 game that is available, and I can tell you, the fun that I used to get from a new game has long since departed. The situation is like this: When I had to pay £40-£50 per title, I was very choosy with the software I bought, and the games I did choose meant that I *had* to invest the time in them after investing the money. These days, with games costing me the price of a gold CDR (65p), I find that when I get a new game, I seem to play it for about ten minutes and then just add it to the collection. Where's the fun in that? It almost seems that I am habitually playing games just because I *used* to enjoy them, not because I do now.

I only hope that the next generation of machines will take the pirates longer to hack, but judging by the intelligence of these people there's fat chance of that happening. Maybe the hardware companies should start employing these people to come up with unbeatable protection methods.

JayPea,
No address supplied

If ever there was an effective advert against piracy, surely this is it.

I can't see exactly how Project X is supposed to succeed. For starters, about the only solid details of games being released are *Tempest 3000*, and various others written by Jeff Minter. This sounds like a bad move to me. It has already been mentioned in your letters page that every machine Jeff has 'launched' (the Atari Jaguar being a prime example) has failed miserably. Quite frankly, I don't really want to invest in a state-of-the-art games machine to play a revamp of a 20-year-old game!

'I now find that when I get a new game, I seem to play it for about **ten minutes** and then just add it to the collection. Where's the fun in that? It almost seems that I am playing games because **I *used* to enjoy them'**

Secondly, "We're not going to have a 'firecracker' launch… it's going to gradually permeate the home…" says Richard Miller. Sounds strangely familiar to me. By the time most people had bought into 3DO, it was hideously underpowered and out of date. The reason consoles have a 'firecracker' wham-bam launch is that the technology in them only has a lifespan of several years, at most. If it takes three years for everybody to buy Project X and actually get the thing established, then what's the point? Newer machines from Sony, Sega, Nintendo and others will be available with far greater specifications by then.

Richard Miller didn't used to hang around with Trip Hawkins or Sam Tramiel, did he?

Dan Melluish,
via email



Tim Gallagher believes that Konami UK was wrong to ban import sales of *Metal Gear Solid*

Konami UK's decision to outlaw sales of imported versions of *Metal Gear Solid* saddens me greatly, especially when I hear that the rest of the industry is following suit. I love videogames – always have, ever since I had a 16K Spectrum. I hate waiting for shoddy conversions of games available months in advance in Japan and America – I want to play games full screen and at full speed. Surely these companies are not losing revenue due to imported games – they still make their money wherever on the planet they sell their games. I thought this country strives for free trade. You can import almost anything, from music CDs to cars, so why are they persecuting game fans?

At the end of the day this is going to hurt a lot of people, including the small independent retailer striving to make ends meet by offering customers something different, the gaming press (and their 'exclusive' reviews) and ultimately the true game fan.

I can see fed-up gamers resorting to software piracy in order to get their fix of optimised software, and I hate to say it but I may be tempted myself.

Tim Gallagher,
Walsall, West Midlands

Ultimately, yes, the revenue from something like *Metal Gear Solid* all goes into the same pot, whether sales are made in Europe, the States or in Japan. But it isn't that simple, because each of the publisher's individual territories has its own budgets, forecasts, marketing campaigns, etc. With a game like *Metal Gear Solid*, for which demand is insanely high, thousands of import sales hamper projections and myriad other factors.

Despite Konami UK's efforts, though, **Edge** hasn't heard of many gamers not being able to get hold of *Metal Gear Solid* on import. Where there's a will, etc.

I hope I'm not the first person to notice this – and I hope for Sega's sake it's too obvious to be true – but the timing of new

next-gen consoles seems to follow the same pattern it did a few years back. Sega comes out first with its amazing console, comes up with some decent games and a few natty add-ons like a modem, and actually does quite well for a while. Sony hides everything and releases its machine a few months later, blowing Sega away with some clever marketing and, well, some more clever marketing. Nintendo milks everything it can get out of its current console before launching a new one at the last possible moment, and getting a nice profit from it thanks to a few excellent games and the appearance of the word 'Nintendo' on the front.

Sony and Nintendo won't mind following this pattern at all, leaving Sega frustrated at being the company which makes Sony's and Nintendo's mistakes for them – all over again.

Call me cynical, but I don't think the quality of hardware or even the games can affect this. When did it ever affect sales in the past?

Graham Courtney,
via email

It certainly affected sales when the launch of the Mega Drive was swiftly followed with software like *Revenge of Shinobi*, *Thunderforce IV* and *Golden Axe*. Happy days...

I am mailing you in response to Mike O' Shaughnessy's letter in **E**65, concerning the reliability of the Sony PlayStation.

I cannot claim to have any knowledge of the quantity of returned faulty 'Stations, as I have never worked in a games store (I am a programmer by profession). However, as an extremely satisfied PlayStation user, I feel I must write to defend the name of the machine.

I bought a PlayStation in the month of its release in the UK, and it lasted me right up until about five months ago, when it finally succumbed to the overheating problem. Now, considering the excessive amount of use it had, that to me is a damned good run. I immediately bought another machine, and have had no problems with it whatsoever.

Let's be fair to Sony: when it became clear that overheating was a common problem, they immediately redesigned the insides of the unit to move the laser head away from the power supply, and by all accounts these newer machines are far more reliable.

As for Mike's allegation of regular crashes during gameplay, this is a problem I have NEVER encountered. The only game ever to crash on my PlayStation was *Wing Commander III*. Even then, that was an internal software error, as the program always gave a screen reporting register and memory contents when it crashed.

It should also be remembered that many, many people seem to have little or no idea of how to look after a games console. In my experience, the majority of people stick their console on the floor in front of the TV.

Inevitably, this usually means that the unit is sitting on a lovely thick-pile carpet for extended periods of time. While this may be very comfy for the user, it certainly is not much good for the console! Carpets block the air vents under the unit, which are obviously there for a reason – to help keep it cool. It never ceases to amaze me how many people don't seem to realise this.

Added to this, of course, is the fact that dirt, dust and (most importantly) static electricity have easy access to the circuitry inside the unit, and all three of these are absolute killers for ANY electronic equipment. It only takes a slight burst of static to fry all or part of a chip inside the machine, and that's it – bye bye, Mr PlayStation! The same would happen to countless video recorders were it not for the fact that TV stands have a nice smooth, flat area at the bottom to keep the machine off of the floor – look and learn, people!

A console is essentially the same as any other piece of sensitive electrical equipment, and should be handled and looked after with the same care as any computer, VCR or CD player. Therefore, I recommend the following three precautions to give your PlayStation a longer life:

1. Don't put your PlayStation on the floor.

2. If you MUST put it on the floor, put something with a smooth, hard surface under it. An off-cut of wood or piece of thick cardboard are ideal. Don't use paper, as that can generate a lot of static. Try to make sure that the material you use is slightly larger than the area occupied by your console, as static can jump small distances and may still damage your machine.

3. If your console is stored in a 'fixed' area (ie on the VCR shelf under the TV, or on a computer desk in your bedroom), keep the area around the unit free of dust. Clear away any dust around the unit at least once a week. Use a slightly damp cloth, as this will destroy any static in the area and help to prevent a dust cloud as you wipe. Do NOT attempt to blow the dust away, as much of it will end up inside your machine!

Of course, as with any product, the older it gets, the more likely it is to develop a fault. But if you keep the above points in mind, you may well extend the life of your console by years.

Adam Wright,
via email

This is one of many letters **Edge** has received concerning the reliability of the PlayStation, with around five times as many readers criticising the machine as supporting it.

One letter has even compared the PlayStation's CD drive to Sinclair's Micro Drive (originally an add-on for the Spectrum and later the integral storage device of the ill-fated QL) in terms of reliability.

Such a claim is ridiculously overblown, of course, but the fact remains that anything with moving parts is going to break down eventually, leaving the question: are CDs actually robust enough for today's breed of videogamers? (Or maybe it's simply a matter of ripping up the Axminster and slapping down an expanse of lino in its place...)

'If it takes three years for everybody to buy Project X and actually get it established, then **what's the point?** Newer machines from Sony, Sega, Nintendo and others **will have far greater** specs by then'

Dreamcast™

Next month **Edge** presents a free supplement dedicated to the launch of the year – Sega's Dreamcast. Showcasing everything you need to know about the 128bit console – including software previews, details of the company's online strategy, and a comprehensive hardware exposé – the supplement will also feature exclusive interviews with Sega president Shoichiro Irimajiri and such renowned software luminaries as Yuji Naka, Yu Suzuki and Tetsuya Mizuguchi. In short, it will be the essential Dreamcast companion.

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